HISTORY OF MONEY IN THE BRITISH EMPIRE AND THE UNITED STATES

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BY

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PREFACE

THE aim of this book is to give a short general history of money in the English-speaking countries—in the British Empire and the United States. The student is better provided with text-books on American than on English monetary history. For the latter there are at his disposal, on the one hand, books on general political and economic history of which the history of money forms comparatively only a small part, and, on the other hand, books on the various branches of the subject—on coins, prices and banking; but he finds a real difficulty in getting in any convenient compass a general knowledge of the financial development of the country.

Yet the history of money has an interest of its own; its study in many cases throws fresh light on historical problems, and in its bearings on political and economic history it has an importance which, from lack of definite knowledge on the subject, the student is often apt to overlook. The problems that confronted a mediæval statesman, in so far as he had to deal with finance, can only be understood if the principles underlying mediæval finance are grasped—the impossibility, for instance, of keeping coin in the country under a badly regulated and imperfectly understood bimetallic system, with the result that one or the other, and occasionally both of the precious metals were constantly disappearing from the circulation; the constant struggle against false coiners and money-dealers, who were always on the look-out to make their private profit by exporting and melting down the good coins and flooding the country with debased money;

the uncertainty of the value of the currency; the impossibility of getting any adequate supply of small coin before the distinction between legal tender and subsidiary coins was understood. These were constantly recurring difficulties which the imperfect financial knowledge of the time rendered practically insuperable.

The financial development of the colonies and of the United States offers problems of a different character. In a newly settled country the chief difficulty was, in the first place, to get a currency at all, and in the second, to adapt and expand it to meet the needs of a rapidly growing industrial community. The solution of the latter part of the problem was generally found in the extensive use of paper money, because paper money can be rapidly and easily increased in quantity with practically no initial expense, and the danger of over-issues, and consequently of depreciation, that resulted from this facility and from the lack of effective regulation was not realized at first. It is in the United States, where the most varied and extensive experiments were made in the use of paper money, where it so completely superseded specie in popular estimation that the necessity of a specie basis was for a time lost sight of, and where the division of authority between the Federal and State Governments made regulation especially difficult, that both the benefits and the dangers attending the development of a paper currency are most clearly illustrated. The study of the financial history of the past century shows (1) the predominance of the single standard as opposed to bimetallism and the general adoption of gold as the sole standard of value in preference to silver; (2) the advisability, as seen in the case of the English colonies, of assimilating the currency system of a small State to that of the larger countries adjoining it; (3) the necessity for regulating paper money and providing for its convertibility into specie; (4) the danger of building up a great mass of financial operations, as in 1907, on a substructure of credit alone, unsupported by an adequate gold reserve.

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INTRODUCTION

Money has been defined by Walker as that which everyone receives without the slightest reference either to his own need or to the credit of the person who offers it "When," he says, "an article reaches this degree of acceptability it becomes money, no matter what it is made of and no matter why people want it" It is only among primitive races that money in this wide sense of the term does not exist, and that trade is carried on under a system of barter, when an article is exchanged against another without any system, and the transaction is regulated only by the relative necessities of buyer and seller As society begins to develop and before any regular trade is possible, the need is felt for some commodity which can be used as a medium of exchange and a common measure of value, and as soon as some article is valued, not merely for its own sake but because it has exchange value as well, money may be said to exist, though only in a rudimentary form At first some commodity easily obtainable, in common use and having a value in use, was taken as money—generally some ordinary necessary of life, as in very early times superfluities did not exist, thus corn was used by some races, oxen by the Teutons, Greeks, and Romans, dried fish in Ireland, etc When some commodity had a recognized exchange value, it was possible for wealth to grow up and for a store of value to be formed, for a man now had an inducement to accumulate more goods than he wanted for his own consumption.

The earliest commodities used as money only fulfilled to a very limited extent what are now considered to be the functions of money; for instance, corn was liable to deteriorate with time, and oxen could only be used for large transactions. Hence a tendency arose to substitute ornaments and the metals of ornament for the necessaries of life—as, for example, the silver bracelets of the Hindoos and the golden armlets of the Anglo-Saxon nobles, which were of a recognized weight and standard of purity. There seems to have been a unanimity of opinion among all races on reaching a certain stage of development that metals are the most suitable commodity to be used as money, and iron, lead, tin, and copper have all been placed under contribution for this purpose, but their exclusive use as money is always a sign of a low stage of commercial development. With all races, as civilization increased, gold and silver took predominance over other metals, for they possess in a high degree all the qualities that are now recognized as essential for money:—"Gold and silver alone are of small volume, of equal goodness, easy of transport, divisible without loss, easily guarded, beautiful and brilliant and durable almost to eternity" (Cantillon). It was only gradually, however, that the precious metals superseded the earlier forms of money. Among the Greeks, for instance, long after the use of metallic money had become general, the term "ox" was still used for money, though it now referred not to the ox itself, but to a certain weight of metal which had represented its value in earlier days. For a long time, too, the precious metals were very scarce, and money of account was largely used; that is to say, in early times very few coins were struck, and the greater number of denominations refer, not to actual coins, but to a certain weight of metal, and money was used as a measure of value much more generally than as a medium of exchange. It was a long time before the ordinary

trade transactions of every-day life were conducted by means of coins, and the use of paper money and development of credit belongs to a later period still

What is meant by the value of money is its purchasing power over commodities, and the purchasing power of money, or the scale of prices, is to a great extent a question of supply and demand The supply of money is the whole amount of money in circulation at any given time, and when the supply is small in proportion to the stock of commodities in the market, the value of money will be high and prices will be low, and as the supply of money increases in proportion to the stock of commodities, the value of money will go down and prices will rise thus the value of money varies inversely with prices Another factor which affects the value of money is rapidity of circulation, or the efficiency of money—that is, the number of transactions performed by a certain amount of money in a given time, or, in other words, the number of times it changes hands. Increased rapidity of circulation has the same effect as an increase in the supply of money, and tends to lower prices, because it increases the amount of work that a given quantity of money can perform The value of money depends only to a lesser degree on the cost of production of the precious metals, and to a greater degree on supply and demand The working of gold and silver mines has always been carried on more or less as a speculation, for, though men have been attracted to it in the hope of making large gains, in many cases mines have been worked at a financial loss, moreover, the increase in the amount of precious metals is generally so slight in proportion to the whole stock of metal in circulation that the effect of new supplies on the value of money is only gradually felt.

In tracing the history of money in England several aspects of the subject have to be clearly distinguished .—(1) the history of the metallic currency; (2) the history

of the metals and of the rates of exchange with other countries; (3) the history of paper money; (4) the history of prices as far as they are affected by changes in the circulating medium.

In dealing with the currency it is necessary to take into account not only the denominations of the coins, but the quality and quantity of the metal contained in them, the methods of coining, and the gradual development of paper money and credit. The history of the metals deals with the relative importance and value of silver and gold, the relation between the market value of bullion and the arbitrary value placed on it by Mint regulations, and the effect of foreign exchanges on the English coinage, for after the development of a gold coinage in the fourteenth century it is impossible to treat the English monetary system altogether apart from the monetary systems of the rest of Europe. A great many factors, other than changes in the circulating medium, affect the history of prices, and it will only come within the scope of this work to deal with those aspects of it directly connected with the currency question.

PART I

HISTORY OF MONEY IN THE BRITISH EMPIRE

CHAPTER I

FROM THE EARLIEST TIMES TO THE THIRTEENTH CENTURY

THE art of coining in this country dates from a very early period, and must have been known in pre-Roman times, at least a hundred and fifty years before the Christian era. Julius Cæsar, in his account of Britain, refers to the coinage, and, though the exact meaning of the passage has been much disputed, it leaves no doubt that a coinage existed in gold and in some less valuable metal—either bronze or copper—and that iron bars adjusted to a certain weight were also in use. The practice among the different tribes must have varied a great deal, and coinage was only used by the tribes of the South and East, who were at a more advanced stage of civilization, a modified form of barter still lingering on in the West. The British coins were small thick coins, modelled on Greek originals.

Either from the visits of the Phœnicians or through trade with Gaul, the Britons had become acquainted with Greek money, and the coins struck by them seem to have been copied roughly by native craftsmen from Gallic imitations of the gold stater of Philip of Macedon. When the Roman occupation began with the invasion of Claudius, 43 A.D., large quantities of Roman coin were imported and Roman mints were established in the country, probably as early as the second century after Christ, for the coinage of

gold, silver and copper money. The use of the Roman currency did not entirely cease with the close of the Roman occupation, for, as the Anglo-Saxons had as yet no special coinage of their own, Roman copper money remained in circulation. In some of the early Anglo-Saxon laws the Roman solidus was used as the basis of calculation in estimating values, though in the West—the most backward part of the country—there is evidence that computation of payments by cattle had not entirely disappeared.

The first period in the history of the monetary system extends from early Anglo-Saxon times to the reign of Henry III—the currency being affected only to a very slight degree by the Norman Conquest—and the chief characteristics of the coinage during this time were (1) that the metal used was almost exclusively silver, (2) that money of account played a very important part in the monetary system, and (3) that coins were scarce and very few denominations were struck.

The use of silver for money in preference to gold was a very general characteristic of the Teutonic races in the early Middle Ages, probably because it could be obtained more easily and in greater abundance, especially after the German mines had been reopened by Charlemagne in the early part of the ninth century: silver was found as well in England, Bohemia, and other districts. Consequently, though a few coins of low value were struck in baser metal, silver was almost exclusively used for currency, the few gold coins that remained in circulation, or that were occasionally struck, bearing too high a value to be conveniently used for purposes of trade. Another theory which has been put forward by Del Mar to explain the almost exclusive coinage of silver is that after the time of Julius Cæsar, when the gold aureus was made the sole legal tender coin of the Roman Empire, the striking of gold coins became the sacred prerogative of the

sovereign pontiff, only the coinage of silver being thrown open to secular rulers, and that this prerogative of the Roman Emperors was continued in mediæval times by the Byzantine Emperors, whose exclusive right to coin gold was acknowledged by the Christian princes of Europe until Byzantium was taken by the Crusaders at the beginning of the thirteenth century. Now, though it seems hardly likely that the rulers of Europe would respect this privilege in a sovereign whose political supremacy they did not acknowledge and whom they regarded as a heretic in religion, yet it is probable that the tradition, handed down from the time of the Roman Empire, that gold was money in a special sense, never quite died out in Europe. Moreover, though the coinage of gold almost ceased in Western Europe after the fall of the Roman Empire, gold was the standard metal used by the Byzantines and the Arabs, who were the only people skilled in the art of coining during this period, and gold coins struck by them had a recognized value, and passed current all over Europe. The coinage of Gaul was of gold until the fall of the Merovingian dynasty in the eighth century, and occasional gold coins were struck during the Anglo-Saxon period in England. The ratio of the value of gold to silver during this time varied very little, remaining fairly stationary at 12 : 1 in the countries that had come under Roman influence, and at 8 : 1 among the Northmen and Arabians; in the English monetary system there were traces of both these ratios, but the Roman system finally prevailed.

During this period, when coin of all sorts was very scarce, it is probable that in a large number of transactions actual coin was not used at all, though the value of the goods to be exchanged would in all cases be estimated in terms of money. Hence the part played by money of account was very important; the pound, the shilling, the mark, the mancus, the ora, were all terms used in esti-

mating values, and represented a certain weight of metal, though no coins were struck corresponding with these amounts. The Roman system of computation by £ s. d. (libra, solidus, denarius) was adopted by all European countries after they had accepted Roman Christianity; in France it was first adopted by Clovis, in England by Ethelbert of Kent at the beginning of the seventh century. In England the pound weight of silver corresponded to the Roman libra. This pound was soon known as the Pound Tower, because the chief mint of the country was established in the Tower, and by it the weight of English coins was regulated. From very early times until 1527 it contained 5,400 grains, and was divided into 12 ounces of 20 pennyweights each: thus there would be 22½ grains in the pennyweight. The Pound Troy, which superseded the Pound Tower in 1527, contained 5,760 grains; hence it was ¾ ounce heavier than the Pound Tower, and the pennyweight contained 24 grains. The Roman solidus was a gold coin weighing 18 grains; the shilling, which corresponded to the solidus, was a division of the pound weight of silver; and, though there may have been a few gold shillings in Anglo-Saxon times, no silver shillings were struck until the reign of Henry VII. The penny, which corresponded to the Roman denarius, was a silver coin representing the two-hundred-and-fortieth part of a pound, and the number of pence in a pound was always uniform. The value of the shilling, on the other hand, varied considerably; in the countries that followed Roman traditions most closely the pound consisted of 20 shillings containing 12 pence, whilst the Goths and the Arabians divided the pound into 48 shillings of 5 pence each. Traces of both systems are found in England, as well as the Anglo-Saxon division of the pound into 60 shillings of 4 pence each. Thus there were three different methods of computing money in Anglo-Saxon England: in Wessex the pound contained 48 shillings, in Mercia 60, and in

most of the other districts 20 shillings; it was not until after the Norman Conquest that the Roman system was uniformly adopted.

The mark was a weight representing two-thirds of a pound. How it came into vogue is uncertain, some authorities leaning to an Oriental and others to a Teutonic origin. According to the former theory, the mark weight, coming probably from Alexandria, made its first appearance in Europe at Venice in the seventh century, where it was used exclusively for weighing metals and not for ordinary merchandise, and in this capacity made its way in the ninth century through Germany and Scandinavia to England, where it is first mentioned in the treaty between Alfred and Guthrum in 879. According to the latter theory, which is advanced by Thorold Rogers, the mark was used as a unit of weight for money instead of the libra by those Teutonic races which had not come under Roman influence. Del Mar considers that the mark among the Goths represents the libra of the Theodosian code, but that, as the ratio of gold to silver among the Goths was 8 : 1 instead of 12 : 1, the silver mark of money was two-thirds of the Roman libra of money, and that the mark was originally the Gothic equivalent, at the ratio of 8 : 1, of the Roman libra. In the Middle Ages the mark seems to have been chiefly used in those places that had commercial relations with Venice, and its use rapidly increased as trade with the East developed. In Venice in the ninth century gold and silver coins known as marks were struck, but elsewhere the mark remained as money of account representing a certain weight, which was always two-thirds of a pound.

The mancus was of Arabian origin, and, though there were some coins of that denomination, there is no evidence that any of them were struck in England, where it was simply a money of account, valued at the eighth of a pound. Archbishop Aelfric, writing at the end of the

tenth century, gives 30 pence as the equivalent of the mancus, and it was estimated at this value as well in the laws of Henry I.

The ora was of Danish origin. The Danes when they settled in England used the Anglo-Saxon penny, but reckoned in oras, at the rate of 12 or 15 oras to the pound. The ora is mentioned in Domesday, where it is valued at 20 pence, but it is not certain whether an actual coin or a certain weight of metal is meant.

Though there was very little coin in actual circulation in the Anglo-Saxon period, the use of money must have been known from very early times, for it was possible to atone for most sorts of crimes by a money compensation, and the runic inscriptions on many of the early Anglo-Saxon coins point back at any rate to pre-Christian times. Some coins may very likely have been brought over from the Continent when the Teutons first settled in the country, and there was an indigenous coinage as early as the seventh century.

The earliest coins struck were the sceat (sceatta) and the stycca. The word "sceat" is Norse, and means treasure, value, or payment, reappearing in the mediæval words "scot" and "shot". The sceattas were small, thick coins, weighing about 18 grains, and were struck both in gold and in silver, the gold sceat being sometimes known as the thrymsa. The value of the sceat is difficult to ascertain, but it is thought that the silver sceat was worth a little less than a penny.

The sceat forms the connecting link between the Roman coins and the Anglo-Saxon penny. The earliest types were taken from those of the usurper Maximus, though some of them bore runic inscriptions; the later types were taken from Frankish models and were inscribed with Roman letters, though these letters were generally so badly formed as to be almost illegible, and to suggest that the engraver was not acquainted with the Latin alphabet.

Some of these coins are inscribed with the names of Saxon princes, and a few bear the legend "Lundonia"—the only case in which the name of a town appears on them. Sceattas do not seem to have circulated north of the Humber.

The stycca was a coin of small value, struck in base silver and copper, which circulated only in Northumbria; it was issued both by the Kings of Northumbria and by the Archbishops of York. Its exact value as compared with other coins is not known.

The sceat and stycca remained in circulation until the ninth century, when they were gradually superseded by the penny. The penny—derived variously from the West German panna (German pfanne), a "pan," or from pand (German pfand), "pawn," or "pledge"—was a silver coin weighing 22½ grains, thinner and broader than the sceat, and 240 pence were contained in the pound.

The penny was first struck by Offa, King of Mercia, in the last part of the eighth century, and, introduced first into Kent, which was then subject to Mercian supremacy, it soon spread into East Anglia and Wessex. The coins were generally inscribed on one side with the name and title of the king or archbishop by whose authority they were issued, and on the other with the name of the moneyer—the person by whom the coin was made. The penny was modelled on the denarius of the Franks, which Charles the Great had made the monetary unit throughout his dominions. The substitution of the penny for the smaller and thicker coins of earlier days soon spread rapidly over Europe, and for some centuries pennies were almost the only medium of exchange in Northern Europe. The halfpence and farthings are mentioned in the Anglo-Saxon paraphrases of the Bible, but there is no sure evidence that farthings were struck; halfpence were struck by the Kings of Wessex from the time of Alfred, and are mentioned in the laws of Cnut in payment of

fines. They were not struck after the Conquest until the reign of John.

The monetary system of later Anglo-Saxon and Norman times shows a curious mixture of foreign influences. The Roman system of £ s. d., the Frankish penny, the Danish ora have already been mentioned, and to these must be added the Arabian and Byzantine coins. Traces of Arabian influences can be seen in most mediæval currencies, for the Arabs were the only skilled moneyers in Western Europe; the standard of fineness for the metal, the terms "mancus" and "carat," the flat, thin form of the coin, seen in England first in the penny, were all Arabian. The only Arabic coin known to have been struck in England was the gold dinar of Offa of Mercia, valued at 34 or 36 pence, and bearing a Mohammedan inscription in Arabic letters, and it is not certain whether an Arab moneyer was employed by Offa or whether an Arabic coin was copied by English workmen. These coins were very scarce, and were probably struck to enable the king to fulfil his promise to the pope to send to Rome an annual tribute of 365 gold mancuses. Other Arabic coins may have been struck, but no traces of them remain. Byzantine influence is seen in the gold bezants of Constantinople, valued at 40 pence, which were current all over Europe. The silver coins of France, Venice, and other States were in circulation, and in Norman times were rated by proclamation at something near their bullion value.

The Norman Conquest had very little effect on the monetary system. The division of the pound into 20 shillings of 12 pence became general, and other modes of computation disappeared; a certain number of foreign coins always remained in circulation, but the penny was for the next two hundred years practically the only coin struck by English mints, and was the staple coin in circulation. After the Conquest the standard of weight and

fineness, though not altered, became more important and more generally known. The standard of fineness for silver was 11 oz. 2 dwts. of fine silver to 18 dwts. of alloy, the standard of weight for the coins was 22½ grains, and pennies struck in accordance with this standard of weight and fineness were known all over Europe as Sterlings or Easterlings. The origin of this term is uncertain. Del Mar in "Money and Civilisation" traces it back to the Ostrogoths, who on the fall of the Roman Empire became heirs to the silver mines of their country, and as a result "the purity and uniformity of their coinage, coupled with the trading activity of the owners, gave to the Easterling pennies a currency through North Europe which was refused to the doubtful and debased currency of the Empire." The sterling pennies of Saxony certainly formed the basis of the monetary system of Charles the Great, and later on in the Middle Ages the term Easterling was used all over Europe to designate the pennies of England. The standard weight and fineness of the penny was maintained for centuries, variations being due only to carelessness and incompetence on the part of the moneyers. The weight remained stationary at 22½ grains until the reign of Edward I, when it began gradually to decrease; the standard of fineness was maintained until the debasement of the coinage by Henry VIII.

The coinage during the Norman and Plantagenet period was issued at very irregular intervals and in a very casual manner, no money bearing the name and portrait of the reigning sovereign being issued at all in some reigns. Both Richard and John seem to have been content to use the dies of Henry II, though Richard had a special coinage struck for use in Aquitaine, and John had farthings struck for circulation in Ireland as well as a few halfpence for circulation in England. All through this period there was constant difficulty from the corruption of the coinage, by which is meant the clipping of the coins, the issue of

base money by unlicensed moneyers, and the importation of large quantities of base money from abroad. In the reign of Henry I the current coins were so bad that they would not pass even from hand to hand. In order to try and check this evil, the exchange of money by any one except the moneyers appointed by the king was prohibited, and even they were to carry out all their transactions publicly before two witnesses; heavy penalties were imposed on offenders—mutilation by the civil powers and excommunication by the Church—but with little result. In 1125 Henry sent over orders from Normandy to punish all the moneyers in England with the utmost severity of the law, because the money was so corrupt that it would not pass in any market; this order was carried out at Winchester by Roger of Salisbury, only three moneyers escaping with impunity, and on these fell the task of making a new coinage for the country.

In the reign of Stephen, in defiance of laws to the contrary, the barons exercised the right of private coinage—a right which was exercised for a long time by the nobles in France, but which had been checked in England by the firmness of the Conqueror's rule. Money was now struck in nearly every important castle and a great deal of light money was issued by the nobles for local circulation, known generally as "blanc money" or "album money." The metal used was for the most part a mixture of tin and silver, and it bore so low a value that "in twelve or more shillings the value of twelve pence could not be found." Henry II, when he restored order in the country, tried to improve the state of the coinage, but it was not until 1180 that any thorough reform was made. By that time coins were irregular in shape and the inscriptions almost illegible, and a new round coinage was issued, known as the "short cross pennies," which continued down to the middle of the reign of Henry III; the reform was much needed, but it

seems to have been carried out in a manner very burdensome to the people. The illicit coinage of the nobles was checked, but it was found almost impossible to stop it altogether, and the albata, or white money, composed mainly of tin, is always distinguished in the Exchequer rolls from silver money. This base money, notwithstanding its low value, was certainly useful, especially in the reign of Richard I, when the country was stripped of its precious metals to provide for the necessities of the king. The king was absent from England during the greater part of his reign, and very little money seems to have been struck during these years. Moreover, in addition to the large sums needed to defray the expense of the Crusade, coins to the extent of 150,000 marks of pure silver of Cologne weight were melted down, refined, cast into bars and exported to pay the king's ransom. It is estimated that about a third of the whole available stock of silver was withdrawn from the country for this purpose, and considerable inconvenience would have resulted from the scarcity of the circulating medium if the base money of the nobles had not to a certain extent supplied the deficiency. Hence the circulation of base coins continued, and the coins issued by the mint were clipped until by the time of Henry III the coin was "so corrupted and debased by clippers and counterfeiters that neither the English themselves nor their foreign neighbours could any longer endure it." During this reign, partly as a result of the king's weak rule, the state of the coinage was worse than it had ever been before; coins were reduced by clipping to less than half their usual weight, trade was checked, no foreign produce was brought in, and the country was flooded with base money from the Continent. Proclamations forbidding the use of this base money were quite ineffective, as the scarcity of coin made it almost impossible to dispense with any part of the existing currency, however defective, and at the same time made the work of reform extremely

difficult for the Government In 1247 the state of the coinage was so bad that at a great Council held at Oxford the question of an alteration of the standard was discussed, but this scheme was given up, and the following year a general re-coinage was undertaken, under conditions, however, that were very burdensome for the people From every pound was taken thirteen pence to cover the cost of coinage, and the new money, when coined, was exchanged for the old by weight, thus the whole expense fell upon the people, and, according to Matthew Paris, a man bringing thirty shillings to the exchange office would hardly get as much as twenty in return.

From the earliest times the right of controlling the coinage rested with the king, though for a long time the actual work of coining was not done by royal officials. During the period of the Heptarchy, when there was probably one central mint for each petty kingdom, there was no uniform coinage for the whole country, each king coined his own money, and the right of coinage was enjoyed as well by the archbishops, bishops, and abbots though the privilege of placing their own portraits with their names on coins was limited to the Archbishops of Canterbury. After the country had become politically united, the coinage was controlled by the king and the Witan, and by the time of Athelstan one sort of money was current throughout the kingdom For a long time after this, however, the work of coinage was not centralized, and mints were established in every important town, for, when communication was so difficult, it would have been impossible for new money to circulate freely throughout the country, if it had been supplied from one source only. According to the account given by Stow, Athelstan, who was the first king to reorganize the coinage and to make mint regulations "made seven mints at Canterbury, four for the king, two for the archbishop, one for the abbot; at Rochester, three, two for the king and one for the

bishop. Besides these, in London eight, in Winchester six, in Lewes two, in Chichester one, in Hampton two, in Salisbury two, and in every other town one coiner." There was, in fact, hardly a town of any size and importance without a mint of its own, though from the time of Ethelred II, and perhaps earlier, all the dies were engraved at one place and were then distributed to the local mints. Very little information is given in the Chronicles about the coinage, and the only officials mentioned in the Anglo-Saxon laws are the moneyers, who seem in early times to have been also engravers of the dies, as the Anglo-Saxon coins were often inscribed with the name of the moneyer as well as of the sovereign, and it was the moneyers who were probably responsible for the integrity of the coinage. They also seem to have carried on the work of exchange, for as trade increased it was necessary that there should be men in every trade centre who were skilled in the business of exchanging the coins of different countries. In return for the performance of these various duties, the moneyers always enjoyed certain privileges, such as partial exemption from taxation, exemption from serving on juries, etc. The reeve, who is mentioned in Anglo-Saxon and Norman laws, was probably the presiding officer of the mint, because, if any person accused of falsifying the coinage pleaded that he had acted by licence of the reeve, the reeve was to pledge himself by the triple ordeal, and if he failed to prove his innocence, he was to be punished for falsification of the coinage.

After the Norman Conquest the officers of the Mint seem to have been to some extent under the control of the Exchequer, and after the reign of Stephen the royal prerogative over the Mint was more strictly maintained, and the work of the coinage became more centralized. Gradually the number of provincial mints was reduced, and by the reign of Richard II the Mint at the Tower did

the work for the whole country, with the exception of the ecclesiastical mints of Winchester and a few other places, which lingered on until the reign of Henry VIII. The Mint became also more completely organized, and a complete list of Mint officials is given in the rolls of Henry III, which includes the Master, who had superintendence over the Mint; the Warden, who paid the salaries of the other officials; the Assayer, who was responsible for the purity of the metal; the Cuneator, whose office was hereditary and who looked after the engravers of the dies; and the Moneyer, who received the dies, delivered them up after use, superintended the striking of the coins, and kept a record of their number.

There were various ways in which payments were accepted at the Exchequer. In the general way payments were made "ad scalam," that is, an additional sixpence had to be paid on every pound to cover the risk to the Treasury of a proportion of the coins being under the standard weight. If the coins were very much under the standard weight, payment was made "ad pensum," that is, by weight only, and the coins were accepted only as standard bullion. If the purity of the metal was questionable, the coins were received only as crude bullion, and were sent to the refiners and assayers to be tested, their value being estimated according to the amount of good metal that they were found to contain; this method was known as "per combustionem." In some cases, if the purity of the coins was doubtful, an additional sum of one-twentieth, known as de-albating or blanching money, was exacted to cover all risks from this source, and then it was not necessary to test the coins. It was often a grievance that the light money which the crown had received "ad pensum," or the impure money on which the de-albating fee had been charged, was paid out again by the crown by tale, the king making a profit in this way at the expense of the nation.

The sovereign could also gain profits from seignorage and moneyage. The term seignorage is sometimes used to include brassage, or the expenses of coinage, and is sometimes used to denote merely the profits taken by the sovereign over and above the expenses of coinage. Brassage did not vary very much, but the amount taken by seignorage depended entirely on the needs or caprice of the sovereign and varied enormously at different periods. Moneyage was a sum paid to the king in Norman times in return for his promise not to tamper with the coinage; this payment, however, was always felt to be unjust and oppressive, and was discontinued in the reign of Henry I.

A comparison of prices at widely different periods is always a matter of extreme difficulty, because the conditions of life vary so much, and in early mediæval times coin played so small a part in everyday life that it is almost impossible to get any accurate idea about the value of money then as compared with its value at the present day. In the first place, in feudal times it is impossible to assign a price for land at all, because land was granted away subject to certain conditions instead of being sold or rented; labour dues were general, and wages and rent in money hardly existed, whilst payments and dues of all sorts were constantly given in kind instead of in coin. In the second place, the silver penny, weighing 22½ grains, can no more be compared with the bronze penny of to-day than the pound weight of silver that formed the mediæval pound sterling can be compared with the modern sovereign as a measure of values. Hence it is not until the later part of the thirteenth century, when feudalism was beginning to give way before the advance of trade and industry, that anything like a connected history of prices becomes possible.

All through the Middle Ages the prices of manufactured goods were high as compared with those of the primary

necessaries of life, and beyond these bare necessities commodities in general use were very few and very simple. The price of grain varied enormously with the seasons, and local variations in the same year were often very considerable. Eden estimates that between the Conquest and the reign of Edward III the price of wheat varied from 8d. to £6 8s. a quarter, and, though wheat was not the grain generally used by the peasantry, any failure of the harvests meant a season of scarcity which pressed very heavily on the lower classes. Thorold Rogers estimates the average price of wheat between the years 1260 and 1300 at 5s. 4½d. a quarter, of barley at 3s. 11⅛d. a quarter, and of oats at 2s. 3⅛d. a quarter, and he considers that the price of grain must have been high compared with the prices of farm produce. "The profit on growing corn must, owing to the exceedingly meagre returns to the seed, have been very small, and the advantages obtained by the mediæval agriculturist can only have been derived from the returns of his farm stock. As we proceed we shall find reason to believe that while the cost of corn, owing to the low rate of production, was high and the price necessarily considerable, the market value of all other farm produce, wool and hides excepted, was singularly low and obtainable in plenty by the general community. In these times, I conclude, the culture of the soil for corn crops was a necessity and not an advantage, and the general distribution of land drove the greater proprietors to such kinds of cultivation as would not have been before them except under such circumstances, and it was abandoned when the practical independence of all landowners led them in the sixteenth century to extensive sheep farming." The average price of wool during these years (1260–1300) was 3d. a pound, and the average amount of wool yielded by the fleece varied between 1½ and 2 pounds. The average price of an ox was 10s. 9¼d., of a cow 7s. 3¼d., of a sheep 1s. 5¾d., and of a

good pack-horse 17s. 4½d.; a capon could be bought for 2½d., a cock for 1⅛d., a goose for 2⅞d., and one hundred eggs for 3d.

Eden, in his "History of the Poor," gives a summary of the valuation of movable property taken at the borough of Colchester in 1296 for the purpose of levying a subsidy, as an illustration of the degree of comfort then general among the people. "Of household furniture, the quantity possessed by each family was very inconsiderable. A bed was valued at from 3s. to 6s.; in most houses a brass pot, from 1s. to 3s. value, is to be met with; it seems to have been almost the only culinary utensil then in use. Two or three of the inferior tradesmen possessed silver cups from 1s. to 2s. value; a blacksmith had a silver cup, four spoons, and a mazer cup; silver spoons were also in use—one was valued at 10d.; a cobbler's stock-in-trade was estimated at 7s.; a butcher's stock of salt meat at £1 18s., another's at £1; a tanner's at 7s. and 11s. Almost every family was provided with a small store of barley or oats, usually about a quarter or two of each; rye appears to have been very little used, and wheat scarcely at all. It is probable that corn was generally ground into flour at home, as hand mills are mentioned—a pair cost 12d.; soap and candles with cotton wicks are noticed; some families possessed a cow or two, but more kept hogs; two or three were the usual number of the stock." A subsequent valuation taken at Colchester in 1301 gives a scanty catalogue of household furniture: mazer cups from 1s. to 2s.; beds from 1s. 6d. to 6s. 8d., tripods from 3d. to 9d., brass cups from 6d. to 1s., brass dishes from 6d. to 1s., andirons from 3½d. to 8d., gridirons from 6d. to 1s. 6d., rugs or coverlets from 8d. to 1s. 6d. An interesting inventory of the effects of John Senekworth, bailiff of Merton College, who died in 1314, is given by Thorold Rogers. "It contains a tapetum, valued at 7s., two others at 5s., one more at 20d.; six lintheamina (sheets) at

4s. each, and a materace at 1s.; a red coverlet at 2s., a counterpane (co-opertorium pro lecto) at 4s.; a red gown at 8s., another at 3s., a blue gown at 4s., a kaynet gown at 2s. 6d.; a russet tunica at 1s. 6d.; a banker, *i.e.* a cover for a seat, at 15d.; a table cloth at 1s.; two more, and two napkins, at 6s.; three quisins, *i.e.* cushions, at 9d. each. Besides these articles of linen or clothing Senekworth possessed three gold rings, one of which was broken, the whole being valued at 1s. 6d.; a purse at 4d.; a pouch at 3d.; a knife at 1d.; a forcer, *i.e.* a chest, at 3s.; two glasses (murræ), one with a silver stand, worth 7s., a second 8d.; four silver spoons, valued at 3s. 2d.; two silver seals (formacula), 2s., one of them being mounted by a gilded penny as a symbol; three books of romance valued at 3d.; two pairs of linen panni at 1s.; a basin and ewer at 1s., besides some less characteristic effects."

CHAPTER II

FROM THE THIRTEENTH CENTURY TO THE DISCOVERY OF AMERICA

THE next period in the history of the coinage extends from the thirteenth century to the discovery of America at the end of the fifteenth, when the great increase in the supply of the precious metals revolutionized the monetary world. The chief characteristic that marks the period off from the earlier one is that the currency not only in England but in all the countries of Western Europe was now bi-metallic, and the use of gold as well as silver for purposes of money, though in itself a sign of progress, brought with it many complications and difficulties. This change began with the conquest of Constantinople by the Crusaders in 1204, which gave to the Latin races for the next fifty years control of the Black Sea and the Crimea—then the chief gold-yielding districts—and brought them into close relations with the Byzantine Empire, which had for centuries been accustomed to a gold currency, and it led to a great increase of trade with the East. The trading towns of Italy were first affected by the change, as these lay on the main route to the East, and they reaped the benefit of the trade with the East that developed in the wake of the Crusaders. The gold florin struck at Florence in 1252 started a new era for the monetary systems of Europe; gold coins were struck very soon afterwards in the countries of Western Europe, and in the fourteenth century numerous experiments in gold coinage were made,

and the bi-metallic system became general. From this time, though the two metals were nominally on the same footing and both were unlimited legal tender, the increasing importance of gold, more especially for international transactions, becomes noticeable. In some of the treaties of the later Middle Ages it is expressly stipulated that payments should be made in gold. For instance, in the treaty made between the Black Prince and Pedro of Castille in 1367, it was stated that the florins of Florence were to be used for the payments promised; the dowry given with princesses on their marriage was nearly always paid in gold, the transactions of the Italian bankers were generally settled in gold, and gold was always the official money of the papal court. Some attempts were even made to establish gold as a formal legal standard. France made a very determined attempt to do this in 1577, and in England it was suggested in 1343 by the advisers of Edward III that, by arrangement with the Flemings, all gold money should be taken at its bullion value, and that the value of silver money should be reckoned thereby. These attempts were not successful, but they are a proof of the estimation in which gold was held.

One of the greatest difficulties that governments now had to contend with was the constantly changing ratio between the market values of gold and silver. Hitherto, as gold had been so little used for purposes of currency, this had caused little trouble, and, regardless of the market ratio of bullion, which on the whole had remained fairly steady, the ratio adopted for coin had remained stationary at 12 : 1 in some countries and 8 : 1 in others. In the thirteenth century, as gold was being much more largely used for the currencies of the Italian cities and for the growing trade with the East, the market value of gold bullion was rising relatively to that of silver, and this rise was continued in the fourteenth century. At that time, when both metals were being used as unlimited legal

tender by the countries of Western Europe, the varying ratio between the value of gold and silver bullion was a constant difficulty, and the governments, understanding very little about the economic laws which regulated these changes, tried by arbitrarily fixing the ratio at which the metals were to be accepted at the mint to follow, more or less closely, the changes in the market ratio for bullion. As a rule, however, government action only helped to increase the confusion, for all governments were acting in the same way and there was no attempt at common action. Hence not only were the mint ratios being constantly altered by proclamation, but they varied in different countries at the same time, and in any country the cheaper metal—that is, the metal that was the less highly rated—had a tendency to flow out For instance, in 1474, when the ratio of the value of gold to silver according to the Mint rates was 11·15 : 1 in England and 11 00 · 1 in France, silver, being less valuable relatively to gold in England than in France, had a tendency to flow out of England to France, while gold had a tendency to come from France to England The reason for this must be sought in the action of the money-dealers, the exchangers of coin, and the workers in the precious metals. The general public would use for the ordinary purposes of internal trade any money that was current in their own country and which would pass freely from hand to hand, and the ratio of exchange did not affect them except in so far as it tended to make a scarcity of one or the other of the metals, but there was always a small class of people who could make their individual profit by taking advantage of the difference of the ratio at different places. The exchangers, for instance, would find in 1474 that as the English Mint attached little value to silver, there was no profit to be gained by sending silver bullion to England to be coined ; on the other hand, as a given amount of gold would exchange in England for comparatively large quantities of silver, they would use

their gold to buy up English silver, and would melt down English silver coins and export the metal to France, where it was worth more and where it would exchange for larger quantities of gold.

The rates at which the money of one country will exchange for the money of another are known as the Foreign Exchanges, and, as trade increased, it was clear that the exchanges were directly affected by the state of the currency as well as by the general conditions of trade. The foreign exchanges may be taken as an indication of national indebtedness, for, as is explained by Goschen, it is the exchange of debts—between private individuals for the most part—that is being effected. "As a result of international commerce a certain portion of the community has become indebted to merchants in foreign countries, and in order to save the trouble, risk, and expense of sending coin, it seeks out any portion of the community to whom a similar amount is owing by the identical foreign countries in question, and, buying up these debts, assigns them in payment to its own foreign creditors." The rates of exchange between any two countries are constantly fluctuating because the conditions neither of their currencies nor of their relative indebtedness are likely to be a constant quantity.

In the case of two countries using the same metal for their currency it is fairly easy to determine how much a given quantity of the coin of the one country is worth in the coin of the other. What is known as the Mint Par of Exchange is "the fixed intrinsic value of the currency unit of one country expressed in terms of the currency of another which uses the same metal as the standard of value. The value of a currency unit is taken to depend upon the quantity of pure metal that it contains as fixed by law, and the mint par tells us how much of the other country's currency contains, according to their law, precisely the identical quantity of the same pure metal"

(Clare). The mint par expresses the legal ratio only, and only holds good in actual practice if the coins are exactly what they profess to be. If the currency of one of the countries falls below the legal standard, either in weight or quality, a greater amount will, notwithstanding the mint ratio, be required to exchange for a corresponding quantity of the coin of the other; in this case the exchanges are said to be unfavourable to the country that has to pay the increased amount. As a result of this effect of the currency on the exchanges we see the application of Gresham's Law, generally expressed briefly by the formula that "bad money drives out good money." When the coinage is depreciated, good and bad money are in circulation together for a time, and, unless they have very much deteriorated, the depreciated coins will pass current from hand to hand and will be accepted for purposes of internal trade at their nominal value, while for purposes of foreign trade they will only be accepted at their value as bullion. Hence as good and bad coin can, up to a certain point, be used indifferently within the country, whilst a larger amount of the depreciated money would be required in trading with other countries, it is inevitable that the good coins should be used exclusively for foreign trade and the depreciated coins be left for home circulation. In the case of an exchange of coins of different metals no stable par of exchange is possible, because, as has already been explained, the market rate between gold and silver bullion is constantly changing, while the mint ratios fail to adjust themselves to the alterations of bullion. This led in mediæval times to a perpetual traffic in the precious metals themselves, and to the exportation of the metal which was the less highly valued. In this again can be seen an application of Gresham's Law, for it has been said that under the mediæval bi-metallic system difficulty was caused, not only because bad money drove out good money, but because

the less valuable money was allowed to buy up the more valuable.

Another difficulty during this period was the scarcity of the precious metals, for between 1300 and 1500 the production of gold and silver was almost stationary. Gold was obtained mainly from finds on the eastern shore and from the north interior of Africa, silver mainly from the German mines, but the amount gained was hardly enough to supply the loss by wear and tear; and, as during these centuries trade was rapidly expanding, and a great deal of metal was at the same time hoarded, used in the arts, or absorbed in the trade with the East, a larger supply was needed. The natural difficulties caused by this state of things were increased by legislation; each country tried to get and to keep as large a share of the available stock of metal as possible, and Government regulations, framed with this object, though they were for the most part ineffectual, tended to prevent such a free circulation of money as alone would have enabled the small supply of metallic money in Europe to do all the work that was required of it.

The chief measures taken by the English Government in the hope of securing a plentiful supply of money were (1) the prohibition of the export of gold and silver, (2) the settlement of the ratio between gold and silver by proclamation, and (3) depreciation of the coinage.

(1) The exportation of gold and silver was forbidden on pain of death; merchants were ordered to bring to the Mint for coinage a certain amount of bullion in proportion to the value of the articles imported, and royal officials were appointed at the staple towns to see that a balance of money was paid on each transaction, or, in other words, that in the dealings of each merchant the value of exports was always to exceed that of imports. It was impossible, however, always to avoid paying for goods in money, and merchants were allowed to export gold and silver in bars, provided that the metal used was either bullion or was

obtained from melting down foreign coins, and the exporter had to take an oath that no English coin had been melted down for this purpose This "sworn off" gold, as it was called, was worth 1½d. per ounce more than other gold Special permission was also given to persons travelling abroad, more especially to those visiting Rome, to take with them the money that they needed Even when these exemptions had been provided for, however, the laws against exportation were still far too stringent, and the frequent recurrence of this prohibition in the laws and proclamations at any time of special financial stress affords sufficient proof that it was found impossible to enforce it effectually

(2) The ratio at which gold and silver should be received at the Mint and the rate of exchange of foreign coins were fixed by proclamation, with the object of encouraging an influx of precious metal into the country This policy more often than not defeated its own ends, for as soon as the exchanges turned in favour of England they were upset by the Government regulations of other countries which were being denuded of their currency, and the English Government could only cope with this by making further alterations in the ratio

(3) Depreciation took the form of crying down the coins—that is, the coins were reduced in weight, though they remained at the same nominal value, and it was hoped that, as they contained less metal and were consequently of less real value, there would be less temptation to melt them down and export them Thus the scarcity of metal ed to a steady lowering of the value of the coins—more especially of the silver coins—which went on from the reign of Edward I to the reign of Elizabeth, though the standard of fineness of the metal was not tampered with until the reign of Henry VIII. The silver penny was lowered in value until, by the end of the sixteenth century, its weight was reduced to a third of what it had been in

Anglo-Saxon and Norman times, and the weight of other coins was altered in proportion.

Except for this alteration in weight, no great change was made in the silver coinage during this period. The difficulties from corruption of the coinage still continued; the silver sterlings or pennies were clipped until they were often only half their proper weight, and there was a good deal of base silver money in circulation, some issued by nobles and ecclesiastics or by false coiners for their own profit, some brought in from abroad in payment for English wool, under various names—pollards, crocards, scaldings, etc. The coins resembled silver in appearance, and were composed of a mixture of silver, copper, and sulphur; they were worth not more than a fourth or a fifth of the English silver penny, but for a time were allowed to be current at the rate of two for a penny, until the King made a serious attempt to restore the coinage. All base coins were declared to be forfeited unless they were brought at once to royal officials to be exchanged; the ports were watched, and all persons coming into the country had to produce their money for inspection; exchange tables were established at Dover to examine and keep a check on the coin brought into the country, and severe repressive measures were taken against offenders; lastly, a plentiful supply of good weight coins in pure metal was struck. In spite of all that the King could do, however, base coins still continued in circulation, for illicit mints in Flanders and Germany imitated the good English coins in coins of lighter weight and baser metal, and these coins found their way into the country in spite of Government regulations. In 1310 a petition of the Commons represented to the King that the coins were depreciated by more than a half, and it was ordered by proclamation that coins were to be current at the value they had borne in the reign of Edward I, and that no one was to enhance the price of his goods on that account.

In the next reign "black money" containing one-sixth part of alloy is mentioned, but this again was due to illicit coinage and was not issued by the Mint. Edward I embarked on the policy of depreciation, and the weight of the penny was reduced in this reign from $22\frac{1}{2}$ grains to $22\frac{1}{4}$ grains, and after successive alterations it was reduced in 1465 to 12 grains. The necessity for some smaller coin than the penny began to be felt with the increasing use of money for the ordinary petty transactions of everyday life, and some authorities have suggested that the pennies were broken up into halves and quarters, but this does not seem to be very probable, as the danger from clipping would have been so greatly increased, and silver halfpence and farthings began to be regularly issued from the Mint. Groats—silver coins of the value of 4d.—with half groats of the value of 2d., were first struck in the reign of Edward III in 1351; they were similar in type to the other silver coins and became henceforth an important part of the currency.

The introduction of a gold coinage brought considerable difficulties in its train and led to a good many experiments in currency matters, with very various results. The first of these experiments was the gold penny, issued by Henry III in 1257 in imitation of the gold florin which had been struck at Florence five years earlier; this gold penny weighed 45 grains, or twice as much as the silver penny, it was valued at 20 silver pennies and was made of pure, unalloyed gold. It does not seem to have been popular, probably because its value was too high to allow it to come into general use; difficulties were also caused because it was undervalued in proportion to silver and this led to complaints from the merchants, but these complaints ceased when its value was raised to 24 silver pence. It does not seem, however, to have remained long in circulation, and no new gold coins were struck in the next two reigns. There were still some foreign

gold coins in the country, circulating by weight, and of these the best known were the bezants and the maravedis: the latter, which had originally been struck in Spain, were very well known coins of recognized weight and fineness, and circulated more freely as the bezants began to disappear.

The reign of Edward III may be taken as the time when an indigenous gold coinage became an important part of the currency of the realm. The change was due mainly to the foreign relations of England—both political and commercial—in this reign, but partly also to the difficulties caused by the constant influx of debased silver coins from the Continent. In 1337, when the Hundred Years' War began, Edward entered into alliance with the German princes and was made Vicar-General of the Emperor with power to coin both gold and silver, though it is not at all likely that the English king recognized the necessity for the imperial sanction in this respect. Just at this time a large quantity of base money was coming into the country through the trade with Flanders; it was struck in a white metal resembling silver, and was so inferior in quality that coins to the nominal value of a pound were sometimes worth no more than 40 pence. This influx of base money had caused such a dearth of good money that the Government found it necessary as early as 1335 to try and check the evil by legislation: "Because we have perceived that divers people beyond the sea endeavour to counterfeit our sterling money in England, and to send into England their weak money, in deceit of us, and damage and oppression of our people, we have ordained that from henceforth no religious man, nor other, shall carry any sterling out of the realm of England, nor silver plate, nor vessel of gold nor silver; also that no false money be brought into the realm, that no sterling halfpenny nor farthing be molten for to make vessels or any other thing by goldsmiths nor other, also

that all manner of black money, which hath been constantly current of late in our realm, be utterly excluded."

In 1339 Parliament suggested that every merchant should bring into the country 40s. or more in money for every sack of wool exported, but this had no effect, and complaints were made that the Flemish florins paid for English wool bore a much higher value in Flanders than in England, and that the discrepancy was so great as to cause the loss of a third on all merchandise exported thither. The London goldsmiths were asked to analyse the Flemish florins to discover the quantity and value of the fine gold contained in them and to give advice to the Government on the matter; as a result of these deliberations it was proposed to coin money in fine gold to be current in both England and Flanders, if it could be done by agreement with the Flemings, and to melt down all other gold coins in the country. Consequently, in 1343 were struck the gold florin—sometimes known as the double florin, because it was equal in value to two of the little florins of Florence—the half florin, or leopard, and the quarter florin, or helm. The florin was struck in gold metal 23½ carats fine; it weighed 108 grains and was current at 6s. The ratio between gold and silver that was adopted was 12·61 : 1, but, as this valued gold too highly in proportion to silver, people soon refused to accept the gold coins, and money-dealers made a profit by exchanging these overvalued gold coins for English silver, which they melted down and exported, thus depleting the country of its silver coinage and causing another influx of debased white money from abroad. The following year the florin was declared by proclamation to be no longer legal tender, and it was to be current only as bullion. New gold coins were now struck, known as nobles, together with the half noble or maille noble, and the quarter noble or ferling noble. The nobles were valued at 6s. 8d., and 39½ were coined from the pound Tower of gold; they were to be legal

tender only for sums of 20s. or more and were to be used exclusively for foreign trade, the export of all other gold and silver in coin or plate being strictly prohibited. It was soon found necessary to reduce the weight of these coins, as they were imitated in the Low Countries in lighter and baser metal, and the laws prohibiting the export of English coins and the importation of foreign coins could not be enforced. To meet the difficulty the pound Tower of gold was coined into 42 nobles instead of into 39½, and, as this was ineffectual, the weight was reduced still further in 1351 and the pound Tower coined into 45 nobles, on the ground that English coins "had hitherto been so much better than those of any other nation that they were exported and base money brought into the realm, to the impoverishment of the people." In 1353 it was again forbidden by proclamation to "carry out of the realm the old sterlings or any other money but the King's new money of gold and silver." This "new money" was the coinage of 1351, which, though of the same standard of fineness as before, was made of lower weight with the object of crying down English coins to a point below that of the competing currencies of the Continent. The plan failed because foreign countries retaliated by altering their currency laws, with the result that by the next reign England was again denuded of precious metals. The reason given was still the same, viz., that English coins were better than those of other countries, though nominally of the same value; this meant that the English Mint gave fewer coins in exchange for a pound weight of metal than foreign mints, and consequently very little bullion was brought to the English Mint for coinage and the heavy English money was exported, the gold coins going to the Continent, the silver coins to Scotland. Prohibitions against the exportation of the precious metals were renewed at intervals, but exemptions had to be allowed in order to pay the wages of

the soldiers and officers at Calais and the ransoms of English prisoners in time of war. It was ordered that debts due to foreign merchants were to be liquidated by the exportation of English goods instead of by money payments, and that aliens trading in England were to spend all their money, "saving only their necessary expenses," on English goods, but none of these regulations had much effect.

Another method by which the King hoped to gain wealth, though he only resorted to it with some reluctance, was alchemy, for by this means it was thought that the stock of precious metals could be indefinitely increased. On one occasion an alchemist was brought into England by the Abbot of Westminster, and agreed to make the King rich by his art in return for the King's promise to make war on the Turks; but, when Edward showed no signs of carrying out his promise, he refused to work any longer and was put into the Tower. Edward made more than one attempt to increase the wealth of the realm in this way, but it was always thought to be of doubtful morality, and in the reign of Henry IV the use of the "art of multiplication," as it was called, to increase the stock of precious metals was forbidden by statute and was made felony. The desire to get gold, however, was too strong to be repressed by Parliament, and Henry VI allowed the law to be relaxed and gave licence to various people to carry on their operations in this work notwithstanding any Act to the contrary, for promises were held out that wealth could be provided to pay off all the King's debts, "to the great advantage of the kingdom," and the opportunity was too good to be lost. The law of Henry IV was not repealed until the reign of William and Mary, when it was discovered that people who were skilled in the work of extracting gold and silver from ore were prevented by fear of this Act from carrying on their work in England and removed their industry abroad.

Little change was made in the coinage in the time of the Lancastrians. In 1412, "because of the great scarcity of money at this time within the realm of England and because of other mischiefs and causes manifest," the weight of the coins was still further reduced, and fifty nobles were now coined from the pound Tower of gold, the nominal value of the noble remaining 6s. 8d. as before. In the next reign, as the scarcity continued and all the coins were in very bad condition, the tax collectors, who generally received money only by weight, were ordered to receive any nobles which contained metal to the value of 5s. 8d. in full payment of the sum of 6s. 8d., its nominal value, and all light-weight coins were ordered to be brought to the Tower to be recoined. The difficulty still continuing, Edward IV made an important change in the gold coinage, and by raising the nominal value of the coins without increasing the amount of metal contained in them, he artificially increased the amount of coin in circulation. A new gold coin, known as the royal or rose noble, because it was stamped with a rose—the Yorkist badge in the Wars of the Roses—was struck at the nominal value of 8s. 4d. instead of 6s. 8d., for which sum the noble had hitherto been current, and the nominal value was soon raised to 10s. The place of the former noble was taken by the angel—so called because it was stamped with the figure of the Archangel Michael trampling on the dragon. The angel was made current for 6s. 8d., and half and quarter angels were struck a little later.

Throughout the fifteenth century the scarcity of coin in proportion to the amount of work required to be done by it had caused a reduction of about 40 per cent. in the amount of metal contained in the coins. The weight of the silver penny had fallen from 22 to 12 grains, and the gold coins tariffed at 6s. 8d. contained only 80 grains of gold as against 128 grains which they had contained in

the fourteenth century; moreover, the production of silver had decreased so much that the value of gold had fallen somewhat relatively to silver. It must be remembered that cash or bullion was the basis on which most transactions were carried on; commercial credit as a basis of business was as yet but little known, and the use of paper money was still in its infancy.

The work of coinage was during this period coming more exclusively under royal authority and tended to be more and more concentrated in the London Mint. In the reign of Edward III gold coins were struck only in London and Calais, and, though the King had a mint at York, no gold coins seem to have been issued there. Edward IV struck gold coins at provincial mints established at Bristol, Norwich, Coventry and York, but probably this was only in order to enable the great work of recoinage then going on to be carried through more expeditiously. Ecclesiastical mints were still allowed to issue the smaller silver coins, but never gold, and continued in existence until the reign of Edward VI.

From the time of Edward I the work of the Mint was done by contract. The Mint master undertook the manufacture of the coinage and paid the other officers who worked under him, receiving in return a salary sufficient to pay him for his work and to cover all the expenses of coinage. In order to keep a check on the master, the method of testing money known as the trial of the pyx was instituted. When the new money was struck two coins were taken from every 15 lb. weight of gold and two from every 60 lb. weight of silver, one for private assay within the Mint, which hitherto had been thought sufficient to sanction the delivery of the coins to the owner of the bullion, the other for the public trial of the pyx, which was now thought necessary to guarantee the integrity of the coinage. The pyx was the box in which the coins selected for the trial were placed, and it was secured by three locks,

the keys of which were in the custody respectively of the warden, master, and controller of the Mint, and the testing of these coins was, from the reign of Edward I, conducted publicly before a jury. This trial was repeated at short intervals, sometimes every three months, and was thought to be an efficient check on improper issues of money. In later times it only took place when a new master of the Mint was appointed, in order to give the retiring master his discharge.

The following tables, taken from Ruding's "History of the Coinage," will show how seignorage rates varied during this period :—

(1) Seignorage on Gold.

	Pound weight of Gold coined into	Seignorage	Payment to Master of the Mint	Sum given to the Merchant
	£ s d	£ s d	s d	£ s d
1345	15 0 0	1 3 6	3 6	13 16 6
1345	13 3 4	0 8 4	3 4	12 15 0
1357	15 0 0	0 6 8	1 2	14 13 4
1404	15 0 0	0 5 0	1 6	14 15 0
1446	16 13 4	0 5 0	1 6	16 8 4
1465	20 16 8	2 10 0	2 4	18 6 8

(2) Seignorage on Silver.

	Pound weight of Silver coined into	Seignorage	Payment to the Master of the Mint	Sum given to the Merchant
	£ s d	s d	d	£ s d
1300	1 0 3	1 2½	5½	0 19 0½
1345	1 2 2	1 2	8	1 1 0
1357	1 5 0	0 9¼	6½	1 4 2¾
1405	1 5 0	0 10	7	1 4 2
1465	1 17 6	4 6	—	1 13 0

The right to control the Mint gave the King the right to impress workmen for it. In 1247 Henry III issued a writ ordering the master of the Mint to bring to England from

beyond the seas, and at the King's expense, a person skilled in the coinage and exchange of silver. In 1352 Edward III authorized the masters of the Mint by letters patent to take as many goldsmiths, smiths and other workmen in the City of London or elsewhere as should be necessary for the work of the Mint and to bring them to the Tower and put them to work at wages there; they also had power to seize and imprison in the Tower any who were rebellious, and letters to that effect were sent to all sheriffs. This custom of impressing labour for the work of the Mint was not discontinued until the reign of Elizabeth.

From his exclusive rights of coinage the King derived the right to exchange money—a privilege which had the double advantage of preventing private extortion and of making a profit for the Crown. The profit taken was generally about $1\frac{1}{8}$ per cent.; *e.g.*, in giving silver in exchange for gold nobles the royal officer would give 6s. 7d. instead of 6s. 8d., whilst if he was receiving the silver in return for nobles he would demand 6s. 9d. The royal exchangers had also the exclusive privilege of giving current coins of the realm in exchange for foreign coins, of buying up light money for the use of the Mint, and, as exportation of English money was forbidden, of furnishing merchants and others who were going abroad with foreign money in exchange for English money. In order to enable the King to maintain his monopoly, an exchange was established in every important town, and the custom did not fall into disuse until the middle of the reign of Henry VIII.

During the latter part of this period—roughly speaking from the reign of Richard II—the Mercantile Theory, that was to dominate English economic thought and legislation until well on in the eighteenth century, was taking firm root in men's minds. This doctrine taught the necessity of subordinating the interests of the individual in trade and industry to the idea of national power. In order that

the nation might be powerful it was necessary to keep a large stock of coin and bullion in the country to make adequate provision for naval and military defence. It was with this object now that the exportation of the precious metals was prohibited and trade regulated, in order to get, as far as possible, a cash balance on every transaction, and in later days to arrange to have on the whole an excess of exports over imports, in order that the balance might be paid in bullion. These methods hampered trade considerably, but they were not successful in keeping a larger stock of money in the country than would have been obtained in the ordinary way; yet it was not until the end of the seventeenth century at the earliest that the futility of these restrictions began to be realized.

For nearly three hundred years, from 1261 to 1540, prices varied very little, and this uniformity was caused and could only have been maintained by the gradual reduction in the weight of the coins. Trade and industry were expanding, while the stock of precious metals remained stationary, and the fall of prices, that would naturally have resulted from the increased demands made upon the scanty stock of metals, was checked by the progressive depreciation of the coinage in weight, though not in quality. English prices were much steadier than prices on the Continent. The lowering of the value of coins on the Continent was perhaps a sign of the revival of the trading spirit, whilst the stability of the English coinage until a later period may in that case be interpreted as the sign of a slower industrial and economic development.

All through the Middle Ages the prices of what may be called the primary necessaries of life—food and land—were low, compared with the prices of manufactured goods. In the fourteenth century, when labour services were rapidly being commuted into money payments and feudalism was breaking up, the usual rent paid for land was 6d. an acre, and land was worth fifteen years' purchase.

Fuel and pasturage were generally free, though sometimes dues of a feudal nature were paid to the lord for the right to use the pasture land. The average price of wheat during the period was 5s. 10½d. per quarter, but the price varied considerably with the harvests and there were also great local variations. For the feast of the installation of Ralph de Born, Prior of St. Augustine's, Canterbury, in 1309, it is recorded that 53 quarters of wheat were bought for £19 (7s. 2d. per quarter); 58 quarters of malt for £17 10s. (6s. per quarter), and 20 quarters of oats for £4 (4s. per quarter). Meat was sold for ¼d. per pound, and the price of animals was low, but it must be remembered that there was a great difference between the animals of the Middle Ages and those of the present day. Oxen could be bought for 13s. 1½d. in the fourteenth century, but their weight was only a third of the average weight of oxen of our time, and sheep could be bought for 1s. 5d., but produced only one pound of wool, where they would now produce eight or nine. Wool was worth 3¼d. a pound and was coarse and of poor quality compared with the wool of the present time. Dairy produce was very cheap, because dairy farming was a domestic industry carried on by most of the country population; cheese was sold for ½d. per pound, butter for ¾d. per pound, and 120 eggs for 4½d. Manufactured goods were dearer in proportion; 1,000 bricks cost 10s. 11d., raw iron 4s. 1½d. per cwt., and first quality cloth 79s. 8d. for 24 yards.

The catastrophe of the Black Death in 1349 convulsed the whole economic life of the country, and its effect on prices was to raise the price of labour and to raise temporarily the prices of all articles of which labour formed a considerable part of the value. Land was unaffected, because land is valueless unless labour can be expended on it. Wheat rose very slightly, the price of dairy produce and fish rose considerably, as well as the prices of all manufactured goods, whilst wages rose as much as 45 per

cent. In the fifteenth century wheat fell to 5s. 10d.—slightly below its former average; and, though the prices of animals were steadily rising, oxen selling for 20s. 7d. and sheep for 2s. 2¼d., this may have been due entirely to improved breeding and consequent increase of weight; the fall in the price of wool to 2¾d. per pound was probably due to the increase of sheep-farming. Wages did not go down, but the great advance in manufactured goods was not continued; bricks were now 6s. per thousand, raw iron 5s. 4½d. per cwt., and best quality cloth 58s. 8½d. per 24 yards.

CHAPTER III

THE TUDORS

A NEW period in the monetary history of Europe begins with the discovery of America and the influx into Europe of the gold and silver of the New World. During the latter part of the Middle Ages the stock of precious metals had been stationary; in fact, it had been decreasing relatively to the amount of work that was required of it as trade expanded; but by the end of the sixteenth century the amount of gold and silver had not only increased sufficiently to keep pace with the great commercial expansion of the period, but was also bringing about a general rise of prices all over Europe.

Before the new era began, the total supply of precious metals in Europe probably amounted to about £34,000,000, in the proportion of 11 per cent. of gold to 89 per cent. of silver. As no records were kept in Spain of the quantities of gold and silver brought over from the New World, it is impossible to determine exactly the amount of the new supplies. Humboldt has estimated that, in the twenty-five years after the first discovery of the gold-producing districts by Spain, the annual supply of precious metals obtained from the New World amounted to £52,000, and that during the next quarter of a century the conquest of Mexico and Peru sent up the annual production of gold and silver of the New World to £630,000. Hence in fifty-four years the total supplies gained amounted to £17,258,000, which represented an increase of 50 per

cent. in the total stock of Europe. The produce of the European mines—of the value of about £100,000 annually—was nearly counterbalanced by the loss caused by ordinary wear and tear; but, before long, under the stimulating effects of the discoveries, the production of the European sources of supply had risen to £150,000 annually. As yet the general level of European prices had been very little affected, for the increase had been gradual; a very large proportion of the new supplies had gone into the Spanish Treasury, and it was a long time before they were generally diffused over Europe. It was the opening of the silver mines of Potosi in 1546 that really brought about the monetary revolution; for, between 1546 and 1600, the annual supplies gained from the New World amounted to over £2,100,000, and the effects of this sudden and unprecedented increase were soon apparent in a marked rise of prices.

It has been estimated that by the end of the sixteenth century the total stock of gold and silver in Europe had risen to £155,000,000, and that, allowing for the deduction made for use in the arts, for hoarding, and for trade with the East, which soon caused a constant drain of specie from Europe, the amount of coin must have been trebled during the century. The ratio between gold and silver was also affected, for the increase had been mainly in silver, and as a medium of exchange silver consequently shot ahead of gold and maintained its supremacy all through the seventeenth century, gold forming only 2 per cent. of the whole annual supply. It was not until the end of the seventeenth century, when fresh supplies of gold were obtained from Brazil and when the Potosi mines were becoming less productive, that the balance turned again in favour of gold.

During the Tudor period the currency was becoming much more complex, for the mediæval coins were still struck side by side with denominations of a modern type;

hence there was a great and often a confusing variety of coins, and the complexity lasted through the greater part of the seventeenth century

In the silver coinage the chief change was that coins of a higher denomination were struck in addition to the coins already in circulation—the groat, half groat, penny, halfpenny, and farthing The shilling, which had been money of account since very early times, was struck for the first time as a silver coin in 1504, it weighed 144 grains and was to be current for twelve pence—hence the weight of the silver penny was now 12 grains instead of 22½ grains as in former days On this coin there was for the first time as well some attempt at real portraiture, and the King's face was represented in profile, not full face as had been usual hitherto In the reign of Edward VI the crown, half-crown, sixpence, and threepence were struck, and silver coins for the first time bore dates and marks of value Silver farthings were coined for the last time in the reign of Mary, and Elizabeth struck silver coins of the value of 1½d and ¾d, but these were only issued in her reign, and in the seventeenth century the smaller silver coins—those under the value of 6d—began to disappear

The chief innovation in the gold coinage was the issue of the sovereign or double real, struck first in 1484, which weighed 240 grains and was valued at 20s It was the finest gold coin that had yet been struck in England—in fact, it excelled nearly all the European coins of the period and afforded proof of the growing wealth and prosperity of the country The double sovereign, half sovereign, gold crown, and half crown were issued by Henry VIII, and angels and rose nobles continued all through the period

The difficulties resulting from a badly understood bi-metallic system still continued, and the rates at which gold and silver were to be received by the Mint were still liable to sudden and arbitrary changes, which record the

efforts of the Government to prevent the outflow of the precious metals. Throughout the sixteenth century complaints were constantly made that the coin of the realm was enticed away to the Netherlands After the discovery of America the Netherlands held the central position for trade, which had, since the Crusades, been held by the Italian Republics ; the coins of all countries passed through the hands of their merchants, and, to facilitate commercial transactions, proclamations, or "plakkaats," as they were called, were issued after 1516, tariffing the different European coins against one another and stating clearly the rate of exchange As gold was rather less highly rated in England than on the Continent, good English gold coins were melted down and exported, and as they disappeared from the currency they were replaced by continental coins of the same nominal value but containing less good metal. The diminution of the currency, which resulted in England, was felt all the more keenly because it was a time of expanding trade, and more money, not less, was required for commercial purposes. To meet the difficulty, in 1526 an ounce of English gold was raised in value by proclamation from 40s. to 45s of pure silver , a little later the value was raised to 48s. an ounce, the sovereign was to be current at 22s. 6d. instead of 20s 6d., and the value of other gold coins was altered in proportion Silver coins were to pass current at their previous rates, but the new coins issued were reduced in size These regulations were only temporarily effectual, for the Flemish rates for gold were altered almost directly after the proclamation was issued, and the export of specie began again.

The Acts of Henry VIII dealing with the currency, up to and including the year 1544, were Acts passed in self-defence with the object of safeguarding the currency, not of enriching the King at the expense of the nation. Debasement was in fact forced on the King as the only

means of protecting the national store of precious metals, and to effect this he not only reduced the weight of the coins, a process which had been going on since the fourteenth century, but also lowered the standard of fineness of the metal, an innovation which had disastrous results. The standard of fineness for gold had hitherto been 23 carats 3½ grains of fine gold to ½ grain of alloy, but after 1526 crown gold, so called because it was first used for the coinage of crowns, was issued at 22 carats, and later at 20 carats fine. Hence all through the time of the Tudors and early Stuarts two sets of gold coins—those struck in standard gold and those struck in crown gold—were circulating side by side. The standard of fineness for silver—11 oz. 2 dwts. of fine silver to 18 dwts. of alloy—had remained almost unaltered since the Conquest, and the debasement of silver, when it had once begun, went on very rapidly. By 1543, coins were issued five parts of fine silver to one of alloy; a little later the proportion of alloy was increased to 50 per cent., and then to 70 per cent. In 1465 an ounce of silver had been worth 2s. 1d. in the coin of the realm; in 1527 it was worth 3s., and in 1544, 4s. The excuse for these continued debasements given in the proclamation issued in 1544 still refers to the same difficulty, "the enhancement of the price of these metals beyond the sea, as well in Flanders as in France, which would have drawn all the coins out of the realm if a remedy had not been applied."

Debasement for royal profit began in 1545, when the amount of fine silver in the testoon or shilling was reduced suddenly from ten to four grains, other coins being reduced in proportion. This debasement was due to the arbitrary caprice of the sovereign and stands apart from the operation of economic laws, though it intensified the difficulties already existing. The object was to enable the King to make a profit by paying his debts in base money, and the gain accruing to the Crown from this

source has been estimated at £50,000, but the relief so gained was only temporary, and soon not only the King but private coiners and money-dealers took advantage of the opportunity to make their individual profit at the expense of the general public by coining money which in weight and purity came up to the Government standard. "The sums for which the Government was responsible formed but a fraction of the mischief. Sir William Sharington first of all, controller of the Mint at Bristol, who had been directed, when other mints were busy, to keep his own inactive, made an opportunity of the prohibition. The inhabitants of the Somersetshire villages made away surreptitiously with their church plate. Sharington became the general purchaser, and threw it upon the country in testoons, or bad shillings, in which four ounces of pure metal were mixed with eight of alloy. The profit he kept to himself and the accounts he falsified. How much bad money he coined he could not tell, but he admitted to have gained at least £4,000. The possession of a mint made Sharington the first in the field, but naturally in a little while the entire currency was infected. The pure coin was bought up and coining establishments set at work in France and Flanders and in remote corners of Europe. Bad and good money could not coexist together, and the good disappeared" (Froude). Probably the King himself had no idea of the disastrous results that would follow his action, and did not realize that a comparatively small quantity of base coin thrown on the circulation would cause the good coin to disappear and be replaced by bad, especially as some of the financiers of the day were beginning to say that, as money was only used for exchange, it did not much matter what it was made of, provided there was plenty of it. "If money was plenty all things would be plenty; the greater the abundance of money, the greater the abundance of everything." Just at first the sudden rise of prices caused

temporary industrial activity and a fallacious appearance of prosperity, but this soon vanished, as the rise was not supported by any real increase in national wealth, and the disorganization of the monetary system struck a heavy blow at the manufacturing industry and added to the numbers of the unemployed. The Government soon found itself in difficulties from the same cause, for taxes were paid in debased money, and it had to pay in sterling silver 14 or 15 per cent. interest on its debts to foreign creditors, together with an additional 12 per cent. on the exchange.

During the first part of the reign of Edward VI nothing was done to improve matters; the Government, in constant financial difficulty, renewed bills as they became due, raised new loans to pay the interest on the old ones, and fell back on the policy of depreciating the currency still further. In 1549 the Lords of the Council, having themselves supplied funds for suppressing the revolts, repaid themselves from the profits on the coinage of silver money, throwing base coin into circulation to the amount of £150,000. The following year the plate of the churches was seized under pretext of zeal against superstition, and in addition the gold, silver and jewels were ordered to be stripped from the covers of the books in the Library at Westminster for the benefit of the Treasury.

Some light is thrown on the difficulties of the time by a letter from a London merchant to Cecil, in which he complains of the bad effects on trade of the recent fall of the exchanges, which fall "cometh for fear of the littleness of our silver coin, and is the only cause that all we the merchants of England do rob and carry away all the gold in the land to foreign realms, for that it is to a more profit than the exchange. Also in June, July, and August last [1549] over £100,000 in gold was driven out of England (and yet did silver coin come into England as

fast, and all for the private gain in coining the silver), for that the pound of gold is richer than the pound of white money, which mischief now present doth cause the gold to be bought up . . . so that shortly we shall be quit of all our rich money for a base coin ; and then shall follow a greater fall of the exchange, which is the father of all dearth of almost all things that man occupieth. If we in England should coin six years to come so much white money as we have done in six years past of the value that now goeth, the plentifulness of the money and the baseness thereof together should bring our commonwealth to that pass that, if you should give a poor man three shillings a day for his day's labour, yet you should scarce pay him such a hire as he might live thereof, which God defend should come to pass." He points out that the profits to be made from private coinage are the cause of the difficulty, and urges the necessity for speedy redress, though he acknowledges that "to new fine our base coin cannot be done without more charge than may be borne by the King or the Commons." "But," he concludes, "in the meantime and out of hand, for God's sake, sir, see forward some remedy for the other matter, that we, the merchants, carry not away all our rich money and leave the base money here still. Once the excess of the private gain in coining to other men—supposed as to the King—may be taken away and also our base coin of white money called down to 15s. in the pound—though it be not enough, yet will it do great service for the time, and keep many things at a stay, which else will come to misery." The suggestions put forward in this letter were not immediately acted upon, and the attempt in the new coinage, issued in 1550, to return to the former standard of fine gold, failed, owing to the bad condition of the silver, which drove the new gold coins out of the country. An attempt to reform the silver coinage followed in 1551, but was equally unsuccessful. Edward's advisers had at last realized that the value

of a silver coin depended not on its denomination but on the amount of pure silver contained in it. Hence the current money was called down to within a little of its value in bullion. After April 30th the shilling was to pass as ninepence and the groat as threepence, and in August the shilling was brought down to sixpence and the groat to twopence. At the same time good silver money was issued from the Mint, of the standard of 11 oz. 1 dwt. of fine silver to 19 dwts. of alloy, and the new denominations of the crown, half crown, sixpence and threepence were now struck for the first time. The reform failed because, though the base coins were cried down, they were not called in, and thus good and bad money were circulating side by side. As a result the good coins recently struck very soon left the country, or were melted down and turned into base coin by the numerous private coining establishments, which had been set up in England and on the Continent, and the only advantage gained was that the Council abstained from further peculation.

Mary began her reign with good financial resolutions, but religious matters claimed most of her attention, and want of money soon led her to fall back on the old system of issuing coins of base metal, which she forced into circulation at their nominal value. As a result Elizabeth, when she came to the throne, found the currency in a state of the greatest confusion, for not only was the country almost denuded of good money, but coins of the same denomination varied in weight and standard of fineness. There were, for instance, three sorts of shillings in circulation—a few of the pure shillings recently issued by Edward VI, the shillings of the first year of Mary's reign of the standard of 10 oz. of pure silver to 2 oz. of alloy, and the shillings of the last years of the reign of Henry VIII, of the standard of 11 oz. of pure silver to 1 oz. of alloy. There were four sorts of testers or sixpences current

made of metal containing respectively 8 oz., 6 oz., 4 oz., and 3 oz. of fine silver to the pound. Testers of the first three classes had originally been issued as shillings and had subsequently been called down to sixpence because of the large quantity of alloy which they contained, and they were all equally of the value of 4½d., for those "which lacked in fineness exceeded in weight"; the fourth kind of tester was not worth more than 2½d. Very soon after her accession Elizabeth turned her attention to the currency, and, after one or two preliminary measures forbidding the export of money and reviving the Act of Edward IV that declared exportation felony, a thorough scheme of reform was planned, by which the entire currency was to be called in and its place supplied by new coins of a high and uniform standard.

"The first necessity was to ascertain the proportion of good and bad money which was in circulation. A public inquiry could not be ventured for fear of creating a panic, and the following rudely ingenious method was suggested as likely to give an approximation to the truth. 'Some witty person was to go among the butchers of London, and to them rather than to any other, because they retailed of their flesh to all manner of persons in effect, so that thereby of great likelihood came to their hands all manner of base coin; and to go to a good many of them—thirty-six at least—and after this manner, because they should not understand the meaning thereof, nor have no suspicion on that behalf, requiring all of them to put all the money that they should receive the next forenoon by itself, and they should have other money for the same; promising every one of them a quart of wine for their labours, because that there was a good wager laid whether they received more money in the afternoon—whereof nine score pounds being received of the butchers, after the manner aforesaid, being all put together, then all the shillings of 3 oz. fine and under but not above should

be tried and called out—as well counterfeits after the same stamp and standard as others; and after, the rest of the money might be perused and compared one with another.' Either by this or some other plan, the worst coin in circulation was found to be about a fourth of the whole, while the entire mass of base money of all standards was guessed roughly at £1,200,000" (Froude).

Several schemes for reform were suggested, and finally, by a proclamation issued in September, 1560, the base money was cried down to three-fourths of its nominal value, the Queen promising to give good money at this rate for all the debased coins received at the Mint. The public were invited to hand over their base silver to persons specially appointed to receive it in every market town, and to stimulate the collection a bounty of threepence was promised on every pound's worth of silver brought in.

The people were told that the expense was to be shared between the Crown and the nation, but as a matter of fact the whole of the cost was borne by the people, the Queen making a considerable profit on the transaction, and it was probably the unpopularity of the measure which caused the Government, two days after the proclamation had been issued, to publish an explanation justifying their action, and showing the necessity for the change:—

"First of all it is known that the honour and reputation of the singular wealth, that this realm was wont to have above all other realms, was partly in that it had no other current money but gold and silver . . . now of late days, by turning of fine monies into base [it] is much decayed and daily grown in infamy and reproach and therefore is thought necessary to be revived. Wherein like as Her Majesty for her part meaneth to be at great charges, so every good English subject ought to be content, though it seem some small loss at the first. . . . Also by continuing of the base monies divers persons both in foreign parts and within the realm have counterfeited from time to time no

small quantity . . . and carried out of the realm for these base monies the rich commodities of the same . . . so as counterfeiters and such like have, for small sums of money counterfeited, carried out six times the value in commodities of the realm. . . . By the means also that these base monies were current divers subtle people have changed the same for the gold and fine silver monies of this realm and have transported and carried out the same gold and silver, so as although there hath been coined great quantities of gold and silver, yet no part thereof is seen commonly current, but, as it may be thought, some part thereof is carried hence, and some, percase, by the wiser sort of people kept in store, as it were to be wished that the whole were. . . . Also by continuance of this sort of base monies, although Almighty God hath given now of late years plentiful increase by the earth for which He is to be thanked . . . yet the prices of all things growing and coming from the earth hath immeasurably and daily risen."

Whether the people liked it or not the change was successfully carried through, the return of the base money to the Mint being probably hastened by the fear that the nominal value of the coins would shortly be still further reduced. The amount of base money in the country had been estimated to be of the nominal value of £1,200,000; how nearly this approached to the truth is uncertain, but base money appears to have been brought into the Mint to the extent of 631,950 lbs. in weight, for which the Mint paid out in good money the sum of £638,000. When melted down the base money yielded 244,416 lbs. of fine silver, and this was coined into money to the value of £733,248. Thus the Crown gained £95,000, less the cost of refining and coining and other incidental expenses. The standard of fineness adopted was 11 oz. of fine silver to 1 oz. of alloy, and the weight of the coins was reduced, the silver penny now weighing only a third of what it had weighed in the thirteenth century.

One of the incidental difficulties brought about or increased by the recoinage, and tending to make it unpopular, was the insufficiency of small money, for most of the new coins issued were shillings and groats. To meet the difficulty traders had for some time issued private tokens in lead, tin, latten and leather, generally in the form of halfpence and farthings, "to the great derogation of the princely honour and dignity and to the great loss of the poor, since they were only to be repaid to the same shop whence they were first received." Though these tokens were not, as a rule, regarded favourably by the authorities, their issue was not illegal, and, although their circulation was purely local and their value depended entirely on the credit of the trader who issued them, it is difficult to see how the ordinary internal trade of the country could have been carried on without some such system. In 1561, when it was declared by proclamation that the base halfpence and farthings still in circulation would only be accepted at their bullion value, silver coins to the value of 1½d. and ¾d. were issued by the Mint; suggestions for a copper coinage were made, but were not carried into effect till the next reign.

Thorold Rogers, in his "Economic Interpretation of History," put forward the theory that it was only after this recoinage of Elizabeth that it became customary to make payments by tale instead of by weight, and that the gradual reduction in the weight of the silver coins which had been going on since the fourteenth century had consequently caused no inconvenience because it had had no effect, real prices remaining unchanged; the fact that the penny weighed about one-third of its weight in the fourteenth century, whilst prices had risen three times, he held gave weight to the argument. It is now a more generally accepted opinion that from early times payments had been made both by weight and by tale; in more important transactions the money paid would probably be

weighed, but payment by tale was usual for the petty transactions of ordinary life and business. The law of Henry V, stating that clipped and worn coins were only to be accepted by weight, is in itself proof that payment by tale must have been general. At the end of the sixteenth century it seems to have been the regular practice to weigh gold coins, and in 1587 every borough, city, and town corporate was required to keep, for the use of all, "upright balance and true weights for the weighing of every piece of gold lawfully current in the realm." Many private traders kept scales for weighing gold as well, and in the seventeenth century scales which could be carried about in the pocket seem to have been part of the ordinary equipment of the London merchant.

The results of Elizabeth's reforms were on the whole satisfactory, and the prosperity of the reign is due in great measure to freedom from monetary difficulties. The outflow of gold was checked by the adoption of a ratio to silver (11·79 : 1) which was very nearly the same as that of France and slightly higher than that of Germany, and thus not only was the outflow of gold prevented, but the influx of precious metals from the Continent was encouraged; throughout the reign there was very little change in the Mint rates of bullion, the absence of proclamations on the subject being sufficient proof that the exchange was favourable to England. Only during two periods—from 1572 to 1576 and after 1597—were there complaints of the exportation of good coin. In 1572 the difficulty was caused by a series of plakkaats in the Netherlands, which altered the monetary situation for the whole of Europe, and, to check the drain of metal which resulted, a proclamation was issued forbidding any coins to be accepted below a certain weight. In 1597 complaints arose again from similar causes:—"If good provision be not foreseen, the coins of gold and silver of England will flow over to the Low Countries as fast as

they can be coined." Consequently there was in 1601 a final revision of the Mint prices of metals, but the Government made the serious blunder of lowering the ratio of gold to silver instead of raising it, with the inevitable result that gold continued to flow out all the more rapidly, and this paved the way for financial difficulties in the next reign. This mistake was especially disastrous at a time when the production of silver was going up by leaps and bounds, when consequently the market value of gold bullion was rising rapidly relatively to that of silver, and when the currency of other European countries was being adapted to the new commercial ratios between the two metals.

The period of the geographical discoveries was a period of trade expansion, but prices were at first only very slightly affected, for the trade revolution of the sixteenth century hardly touched England. There was no rise at all before 1540, except in the case of goods from the East, where it was due to the increased demand for Eastern produce and to the alterations in the routes of trade; between 1540 and 1582 the rise was due only to debasements of the currency. The reasons why prices rose so slowly were partly the extravagant use of the precious metals in the arts—for gold and silver lace, plate, and gilding—partly the custom of hoarding money, partly the fact that coin was not yet exclusively used and labour was still paid to a certain extent in rations, and partly that the precious metals from the New World came in slowly at first, and were only very gradually diffused throughout Europe.

In the first period of the rise of prices—from 1540 to 1582—the change was due to depreciation of the coinage; and as it was the silver currency that was chiefly affected, and silver was the ordinary measure of value for internal prices, all articles of home produce became dearer. A rise of prices due to a depreciated currency gives a tem-

porary appearance of prosperity, for the higher prices just at first mean higher profits, the formation of capital goes on rapidly, and there is more work and a quicker return for expenditure But, as this inflation of prices is not based on any real increase of wealth, the appearance of prosperity is fallacious, good money is soon driven out of the country by the debased currency and widespread poverty results The true cause of the disturbance of prices was not recognized at the time, there was a general opinion that it was due to combinations among middlemen, and in the reign of Edward VI laws were passed against engrossing the necessaries of life and against conspiring to raise the price of food

The following passage, quoted by Cunningham, shows that the great rise in the price of wool was thought to be due to speculation among graziers "They that have great numberment of sheep must needs have great store of wool, and we cannot think who should make the price of wool, but those that have great plenty of sheep And we do partly know that there be some dwelling within these shires (Oxfordshire, Buckinghamshire, Northamptonshire), rather than they will sell their wool at a low price, they will keep it a year or twain, and all to make it dear and to keep it a dear price." The end of the reign of Henry VIII and the reign of Edward VI was a time of increasing discontent and poverty, for wages did not rise in proportion to the rise of prices, and artisans found it extremely difficult to live on their earnings. The "Dialogue concerning the Weal of England," written about 1549, complains that though artisans were paid more than before, yet they could not live on their wages, and that men had no money to spare for public purposes; that there was a great dearth of commodities, not only of English goods but of imports, that everything cost about a third as much again as a few years before, and that

men were unable to live with £200 as well as formerly with 200 marks.

The labourers and artisans suffered more than the middle classes from the depreciation, for wages were paid in the debased coin according to its nominal value. "The working man was robbed without knowing how or why, while the tradesmen and farmers, aware that a sixpence was not a sixpence, defied the feeble laws which attempted to regulate the prices of produce, charged for their goods on a random scale, and secured themselves against loss by the breadth of margin which they claimed against the consumer" (Froude).

Roughly speaking, in this period prices rose more than 100 per cent. whilst wages rose only 50 per cent., and owing to the condition of the coinage trade sank down almost to the point of barter. The depreciation of the fourteenth and fifteenth centuries came at a time when prices were tending to fall, and checked that tendency ; the depreciation of the Tudors, which affected the quality of the coins as well as their weight, came at a time when prices already showed a tendency to rise, and increased the material difficulties of the change by inflating prices out of all proportion to the increase in the supply of the precious metals. The prices of foreign goods rose at once in proportion to the debasement, and this unsettled the prices for articles of home production; these rose as well, but the difficulties of communication and local ignorance as to what was going on elsewhere prevented them from rising equally. As the good money was gradually melted down or driven out of the country, this rise of prices was not accompanied by an expanding but by a decreasing currency, and this attempt to meet an expanding trade with a diminishing and almost valueless coinage caused industrial and commercial disaster.

The primary necessaries of life soon rose in price.

Wheat was now 15s. the quarter, showing a rise of 2·40 per cent., and other crops rose in proportion; oxen were sold for 70s. 7¼d., sheep for 6s. 4d., and wool for 7¼d. per pound; farming produce and salt increased in value on an average 2·53 per cent. Dairy produce rose considerably, for the peasantry were now poorer, and with the increase of sheep farming, dairy farming declined; cheese was now 1½d. per pound, butter 2¾d. per pound, and 120 eggs 2s. 6d. The prices of manufactured goods were not affected to the same extent, for, as wages did not rise in proportion to the rise of prices, the change was seen least in those articles whose value depended mainly on labour, though textile goods seem to have felt the full effect of the change; bricks were sold at 11s. 3d. per thousand, raw iron at 10s. 6½d. per cwt., and cloth at 161s. per 24 yards. The cost of boarding and lodging a labourer, which may be taken as a measure of the purchasing power of money, had risen about 300 per cent. In 1542 the expense of boarding and lodging a labourer was reckoned at 2d. a day; in 1551 it had risen to 2s. 6d. a week, and in 1553 to 3s. 6d. a week, and in 1562 the cost of victualling a man in the dockyards was reckoned at 4s. a week.

There is a great difference of opinion among economists as to the effects of the new supplies of the precious metals on prices. Schoenhof, for instance, denies that they came in in sufficient quantities to have any appreciable effect, and adopts the theory of Thorold Rogers that payments until the recoinage of Elizabeth were made by weight and not by tale. He considers consequently that the rise of prices in the sixteenth century was only nominal, and that as payments were first made by tale after 1562, when coins weighed only a third of what they had done in earlier days, real prices remained steady, or, in other words, that the purchasing power of the pound weight of silver was unaltered, though this pound weight was now divided into 60 shillings instead of into 20. On the other hand,

it is difficult, if this view is accepted, to understand why the coinage should ever have been depreciated, for, if payments were invariably made by weight, there can have been no object in lessening the contents of the coins, and it also fails to explain why the rise of prices began before 1562. It is the opinion most generally accepted that in the latter part of Elizabeth's reign the influx of precious metals was so great as to cause a very considerable rise of prices, and this rise was all the more marked and sudden because the entrance of the new supplies into the country had been postponed by the debasement of the currency, which had made it impossible to keep good coins in circulation. The rapidity with which the change took place caused some difficulty, but on the whole the rise of prices brought about by the increased supplies of the precious metals benefited the country and was favourable to the rapid growth of industry and commerce; profits were increased, the formation of capital was encouraged, and in spite of higher rents farmers were able to accumulate savings. People with fixed incomes, among whom must be counted the landed gentry and the Crown, suffered from the change, and labourers and artisans suffered as well, for wages, as in Tudor times, did not rise in proportion to the rise of prices. Between the years 1593 and 1602 the price of wheat had risen to 34s. 10¼d. per quarter, oxen to 103s. 10d., sheep to 9s. 6½d., wool to 9d. per pound. Cheese was 2¾d. per pound, butter 4d. per pound, and 120 eggs, 3s. 7¾d. Bricks were 13s. 2d. per thousand, raw iron 13s. 6d. per cwt., and cloth 147s. 4¾d. per 24 yards.

CHAPTER IV

THE EARLY STUARTS

In the history of the coinage there is very little to mark off the period of the Stuarts from that of the Tudors. The difficulties with which the first two Stuart kings had to deal were similar to those of Tudor times and a similar line of policy was adopted to meet them. The complexity of the currency continued and there was not very much change in the denominations of the coins.

The distinction between Crown and Standard gold was still maintained, and in the reign of James I marks of value were first put upon gold coins. James issued in crown gold the unite or sovereign, which marked the union of the Crowns of England and Scotland, the half sovereign or double crown, the crown and half crown, and the thistle crown, valued at 4s. The laurel was struck in 1619, and was the pound sovereign issued at a somewhat reduced rate, in order to avoid the inconvenience caused by raising the value of the gold coins. In standard gold were issued the rose real or rose royal, valued at 30s., and its half, the spur royal, valued at 15s.; the angel, valued at 5s., and the half angel were also issued in standard gold but were not struck after 1610. The thistle crown, laurel, rose royal and spur royal were issued only in this reign. Gold coins current at £3 and silver coins of the value of 20s. and 10s. were struck by Charles I, but were not continued after his reign. The chief change in the silver currency was the gradual disappearance of

the coins under the value of 6d., and the consequent necessity of providing some form of coinage of small value led to the striking of copper coins, which had been suggested in the last reign. James disliked traders' tokens, and in 1613 he granted a patent to Lord Harrington to issue copper farthings weighing 3 grains. These coins were, however, not popular, partly because of their small size and partly because of their slight intrinsic value, and consequently, though traders' tokens were declared to be illegal, they still continued in circulation. Copper farthings were issued also in the reign of Charles I, but still under patents granted to individuals. No copper money was struck officially during the Commonwealth, though dies had been prepared for that purpose; a few small silver coins of the value of 2d., 1d., and ½d. were struck, but the dearth of a small coinage was still supplied by traders' tokens, which were struck by the principal tradesmen in all the large towns.

Great difficulty was found during the Civil Wars in providing the King with money, and there were various methods by which the country was supplied with a coinage during this period. (1) Money was issued by order of Parliament at the Tower Mint. (2) Money was struck by local mints established after the outbreak of the war in several important places under royal control; a good deal of money, for instance, was coined at Oxford from the silver plate belonging to the colleges and to private persons. (3) Money was issued in towns and castles in a state of siege. This siege money was struck only by adherents of the King; it consisted almost entirely of silver, and some of the coins were stamped with the names of the castles or towns where they were struck. In some cases the plate from which these coins were struck was not even melted down, and the coins were simply pieces of metal of irregular shape cut out and then stamped and engraved with a device.

No money was issued during the King's life without his image and superscription, but when in 1649, after the abolition of the kingship and the House of Lords, Parliament assumed sovereign rights, money was issued by their style and authority. Gold coins were issued of the value of 20s., 10s., and 5s., and silver coins of the value of 5s., 2s. 6d., 1s., 6d., 2d., 1d., ½d. One side of the coins was stamped with the English arms, with the inscription "The Commonwealth of England"; the other side bore the arms of England and Ireland, with the inscription "God with us." During the Protectorate, and even as early as 1651, coins were issued bearing the image and superscription of Cromwell, but it is doubtful whether they ever circulated as current coin in the country.

Throughout the Stuart period the Government was still waging an incessant struggle to keep a good supply of precious metals in the country, but at first with very little success. English money was overvalued relatively to bullion; *i.e.*, the English Mint did not pay in coin for bullion at such a high rate as the mints of other countries, and consequently very little bullion was brought to it to be coined, and English money was melted down and exported. Moreover, the constant variations of the ratio between gold and silver always meant that the metal that was relatively the cheaper tended to be driven out of the country, and so there was always a scarcity of either gold or silver, and sometimes a scarcity of both. More and more, however, Government was becoming impressed with the necessity of keeping up a good supply of gold, for gold was now being more generally used for international payments, and it was only when there was a good stock of gold in the country that the Government felt financially secure. A scarcity of silver on the other hand was not so serious, though, as it was the coin in which wages were paid and most of the internal trade was carried on, a great deal of inconvenience was caused to the people. To keep

up the gold supply and prevent exportation gold was steadily overrated, and the ratio of gold to silver, which in the reign of Elizabeth had been about 11 : 1, rose in the reign of James I to 13 : 1, and in the reign of Charles II to 15 : 1. Hence, as the English Mint paid such high prices for gold, it was more profitable to bring gold to the Mint than silver, and consequently there was through the greater part of this period a great scarcity of silver; heavy silver coins were melted down and exported, and those that remained were under due weight.

At the beginning of the reign of James I, as the result of the blunder of Elizabeth in lowering the ratio of gold to silver, gold tended to flow out of the country. To meet the difficulty the ratio was raised in the second year of the reign from 10·90 : 1 to 12·15 : 1, with the result that then "and for six years after there was more plentie of gold than ever was before" (Stow). The relief, however, was only temporary, for the rise in the value of gold coins was not equal to the rise in the value of gold bullion relatively to silver bullion in the market, and soon the export of specie began again. This was a source of great anxiety to the Privy Council, and after much discussion the only possible remedy was adopted, and the ratio of gold to silver was raised still further, the current value of gold coins being raised 10 per cent. The reason given for the change in the proclamation was "that the unite or gold coin that passed for 20s. in England was valued in foreign countries, and especially in Holland, at 22s.," *i.e.*, at 10 per cent. more than the rate at which it was current in England; the gold sovereign was now to be current in England also for 22s., and the ratio of gold to silver was by this step raised from 12·15 : 1 to 13·32 : 1. This change was supported by a proclamation forbidding the export of bullion and the melting of gold for the manufacture of gold braid and plate, and limiting the exports of the East India Company to £6,000 in bullion. Government had now

erred in the opposite direction, for the rise in the ratio of gold was too great and it began to have a bad effect on the stock of silver :—"This last raising of gold ten in the hundred did bring in great store thereof, more than we were accustomed to have in the kingdom, but it carried away all or the most part of our silver" (Mun). A letter from the Lords of the Privy Council to James, written in 1618, complained of the scarcity of silver at the Mint and of the great abundance of gold. During the last seven years of Elizabeth's reign more than eight times as much silver as gold was coined, whilst between the years 1609 and 1616 gold was coined to the value of £1,546,309, silver only to the value of £57,609.

As a result of these sudden and violent changes, the country was brought face to face with a great monetary crisis—one of the most serious in English history—which began about 1613 and reached its height about 1622. At the beginning of this period there was a scarcity of both gold and silver; the change in the ratio soon checked the outflow of gold, but nothing was done to help silver; and during these years hardly any silver bullion was brought to the Mint to be coined, with the exception of what was brought from Wales. There was very little trade with Spain because of the wars, in Holland and France silver bullion was worth 5s. 4d. an ounce, whilst the English goldsmiths were willing to pay 5s. 3d. an ounce for silver bullion and coin, which they melted down and converted into plate, wire, braid, etc. Consequently, as the Mint in England paid only 5s. an ounce for silver bullion, there was no profit to be gained by taking it there to be coined, the good silver coins disappeared, and only light money was left in circulation as currency. By 1620 the disorganization of trade caused by this scarcity was so great that the amount of wool exported was only a third of what it had been in previous years. The following year the merchants of the leading

companies were asked to give advice on the matter, and they declared that the difficulty was due to the undervaluation of English coins abroad, *i.e.*, that English coins were worth much less on the Continent than in England; consequently English merchants who wanted to buy foreign goods had to pay for them at such high rates in English money that it was impossible to sell them in England at a price that would repay them. In 1622 the difficulty had increased so much that trade was at a standstill, a large number of men were out of work because the clothiers could not get a market for their cloth, and stocks of cloth were accumulating and could not be sold. The justices of Gloucester reported that "the people begin to steal and many are starving; all trades are decayed; money very scarce"; and similar reports came from Somerset: "wools and cloths are grown almost valueless, and the people are desperate for want of work." Owing to the general poverty taxes could not be collected and only produced a fraction of the estimated amount. In the hope of mitigating the evil the export of raw wool and yarn was forbidden to prevent the manufacturing industry leaving the country, and people of quality in London and Westminster were ordered to go into the country and live on their estates in order to relieve the poor. To encourage the flow of silver to the Mint it was suggested that the pound weight of silver should be coined into 65s. instead of into 62s., as before.

The same difficulties continued through the reign of Charles I and the Commonwealth, but they were never so acute as in the reign of James I, and no further change was made in the denominational value of the coins. The drain of gold to France and the Netherlands, which was again becoming a difficulty, was checked when the ratio of gold to silver was raised to 15 : 1, but this change made it so much more profitable to bring gold to the Mint than silver that the coinage of silver practically ceased and

the difficulties from the scarcity of silver were greater than before. Rice Vaughan, a contemporary writer on currency questions, said that owing to the value of gold being raised 2s. in the pound there was a great deal of gold coined but very little silver, so that "a man may go into a great many shops before he can get a 20s. piece to be changed, for the greatest part of the paiements is now in gold, contrary to the former times." This evidence is confirmed as well by Rushworth :—"There was [1632] such plenty of gold and scarcity of silver that the drovers and farmers who brought cattle to Smithfield would ordinarily make their bargains to be paid in silver, and that it was usual to give twopence and sometimes more to change a 20s. piece of full weight." By 1640 there was not one million's worth of silver coin in the kingdom, and between the years 1646 and 1649 the Mint had to be closed because of the scarcity of bullion.

These difficulties do not seem to have been so pressing during the Commonwealth period ; probably some relief had been given by the large amount of silver which had been melted down and put into circulation as coin during the Civil Wars. In March, 1649, Parliament was petitioned by Fairfax and the Council of Officers to reduce the abuses of clipped money, and a committee was appointed to consider currency questions ; the rate of interest was reduced by law from 8 per cent. to 6 per cent., and a bill was brought in to prohibit the exportation of gold and silver bullion. This bill was discussed several times but never reached the final stages—"more mighty business did intervene ;" and generally speaking during the period political matters were so urgent that economic questions, though not entirely neglected, could receive little attention.

In the seventeenth century prices were still steadily rising, for the effect of the influx of the precious metals did not culminate, according to Adam Smith, until 1640, though the rise in the early part of the seventeenth

century was not quite so great as it had been in the last part of the sixteenth. In the seventeenth century population nearly doubled; this was only made possible by improvements in agriculture, and especially by the introduction of winter root crops and artificial grasses, and the increased demands for food supplies kept prices fairly high. The average price of wheat for the first half of the century was 38s. 11¾d. per quarter, for the last half, 40s. 5d.; the price of oxen in the first half of the century was 142s. 2d., though again the increase may have been partly due to increase in weight, and in the last half, 143s. 8d. Sheep had risen less in proportion, the average price being 10s. 7½d. for the first half of the century and 11s. 1d. for the last half, whilst the price of wool declined from 1s. to 9d. per lb. Dairy produce rose slightly and remained fairly steady through the century, the average prices being for butter 5⅝d. per lb., for cheese 3¾d. per lb., and for 120 eggs, 3s. 3½d.. The price of manufactured goods on the other hand increased steadily; the average price of bricks rose during the century from 14s. 8½d. to 18s. 8d. per thousand, and cloth rose from 181s. 10½d. to 195s. 7d. per piece of 24 yards. The last years of the century were years of specially high prices, but this seems to have been due mainly to a series of bad harvests, and throughout the century prices do not seem to have been much affected by currency questions.

CHAPTER V

THE EARLY HISTORY OF PAPER MONEY AND BANKING IN ENGLAND

BUSINESS transactions in the Middle Ages were carried on chiefly in coin or bullion, but the advantages of paper money and credit were not entirely unknown, and as early as the twelfth century Bills of Exchange were used and a rudimentary form of banking had arisen in some Italian towns.

A Bill of Exchange in mediæval times "meant an obligation to pay the value of a certain amount of the money of one country in the money of another at a certain rate of exchange" (Macleod). If, for instance, A,—a London merchant, owed £100 to B,—a French merchant, and B owed an equivalent sum in French money to another London merchant,—C, B would draw a bill on A and send it to C, and C, on presenting the bill to A, would be able to recover the money due to him from A, instead of from B; thus the two transactions would be settled without the employment of money, and the expense and trouble of transmitting and exchanging coin would be avoided. Bills of exchange had been known to the Romans, and their use, which had probably never quite died out, was revived by the Florentines in the twelfth and by the Venetians in the thirteenth century, and was greatly extended at the time of the Crusades by the papal agents who collected sums of money for the Pope in the countries that acknowledged his authority. It is difficult to deter-

mine when they came into general use in England. As early as 1229 there were papal agents in this country, and the Pope drew bills on English bishops and abbots which they were obliged to honour on penalty of excommunication In the reign of Edward I was passed the first law—the Statute of Merchants, 1283—recognizing mercantile obligations, and in 1303 a statute passed for the protection of foreign merchants enacted that they might pay customs duties on their exports by bills on their partners or principals Promissory notes payable to a man or his assigns were known in the reign of Edward IV, and in the reign of Richard II bills of exchange are referred to as a means of conveying money out of the realm, though not as a process in use among English merchants

The general use of bills of exchange lessens the necessity for transmitting bullion, and if the exports of a country exactly balanced its imports there would be no need for the transmission of money at all Exports and imports, however, never exactly balance, and when a country's imports exceed its exports it is obliged to send specie to the extent of the difference, the balance of trade is then said to be unfavourable to that country An unfavourable balance of trade would generally result in an unfavourable condition of the exchanges as well If, to take an illustration, England received more goods from France than she sent there, there would be a larger number of merchants in England making payments to France than there were receiving payments from France, consequently there would be a shortage of bills on France, and, as it is cheaper and more convenient to settle a debt by buying a bill on a foreign country than by sending coin, a merchant, rather than send money, would be willing to pay more for the bill than its face value ; bills on France would then be said to be at a premium. Hence the effect on the exchanges of an unfavourable balance of trade is much the

same as that of a depreciated currency—namely, that an increased amount of money is required to settle debts with foreign countries.

Before the thirteenth or fourteenth century the lending of money at interest formed no part of business life. The taking of interest for money lent, or usury, was forbidden by the Church on the ground that it cost a man nothing to lend to another money which he did not want to use himself, and consequently to receive payment for it was dishonest. As a result, moneylending was for a long time in the hands of the Jews, and, as they had a practical monopoly and their chances of getting the money returned were precarious, enormous rates of interest were charged. But it must be remembered that the Jews lent money mainly to nobles in financial difficulties, and it was not until trade began to develop that moneylending for ordinary business purposes became general. When this was the case the papal laws against usury were soon evaded, and on various pretexts payment was taken for money lent. In England, although the laws forbidding usury were not finally repealed until the latter part of the sixteenth century, the Lombard merchants in the thirteenth and fourteenth centuries began to lend money at interest in defiance of the laws; they also made extensive use of the system of bills of exchange to remit money payments to their own country.

The business of banking in the Middle Ages began with the commercial renaissance of the twelfth and thirteenth centuries in North Italy. The earliest public bank was the Bank of Venice, established in 1157, when the State of Venice, having fallen into financial difficulties and borrowed large sums of money from citizens, formed these public creditors into a corporation with peculiar privileges. Warrants given for a claim on the bank passed freely from hand to hand and were soon found to be as good as money, sometimes even bearing a premium. It was not until 1587

that this Venetian bank became a bank in the modern sense of the word; the coins of all nations passed through Venice, and merchants bringing coin to the bank received in return notes which were promises to pay bullion to the intrinsic value of the coins brought in. The Bank of Genoa, founded in 1407, also owed its origin to the financial difficulties of the State; it was a trading and not a deposit bank, and was ruined when Philip of Spain repudiated his debts in 1596. Private banking flourished chiefly in Florence; here there were in the fourteenth century between seventy and eighty private bankers, who soon gained such an eminent position in finance that they were entrusted with the collection and administration of the public revenues, and the money transactions of almost every country of Europe passed through their hands. The failure of the houses of Bardi and Peluzzi in 1345, when Edward III repudiated his debts to them, caused widespread ruin in Florence. These early Italian banks were for the most part "giro" or circle banks; "notes issued on deposits of specie placed in the bank passed from hand to hand, the deposit remaining untouched until the final liquidation of the whole circle of bargains." The banker made no use of the money and was paid a fee for guarding it.

A much wider influence was exercised by the Bank of Amsterdam, founded in the early days of the seventeenth century, when the Netherlands were the great centre of European trade. The bank was established to cope with the difficulty caused by the influx of bad coin from all parts of Europe, which had reduced the currency 9 per cent. below its nominal value and made it difficult for the merchants to get enough good money to carry on their trade. The bank received debased money of all sorts at its intrinsic value and coined it into good money, giving credit for its value in bullion; no seignorage was taken and deductions were only made to cover the expenses of coinage. Under

the stimulus of what was practically free coinage, large quantities of precious metals poured into Holland and a local rise of prices resulted. At first gold and silver were placed on an equal footing, as both were equally used as the medium of international exchange, and the constant exportation of silver for the Eastern trade was a safeguard against any overwhelming depreciation; in 1648, however, the free coinage of silver ceased, and thus the importation of silver bullion was discouraged. In the seventeenth century the Netherlands could control the exchanges and the balance of trade was always in their favour. In the long run the country gained by this, but the Dutch, equally with the rest of the monetary world, were losers by the secret traffic in coins, which always took away the good money and substituted the bad. Money-dealers soon found that certain coins tariffed on an equality with one another were not really of the same value, and these variations of the legal from the market value afforded, as usual, opportunities of gain for the individual. This bank was the property of the city of Amsterdam, and the bank money, as its standard could always be relied upon, soon bore a premium.

In England the work of dealing in money was in private hands, and in the sixteenth and seventeenth centuries the goldsmiths enjoyed a practical monopoly of this business. The goldsmiths were in the first instance, as their name implies, workers in the precious metals; they were soon dealers in bullion as well, and when in the reign of Henry VIII the exchange of coins ceased to be a monopoly of the Crown, this work too fell into their hands. They seem to have taken full advantage of the opportunities thus opened to them to pick out and melt down full weight coins; and whether they sent the bullion to the Mint to be coined, or sold it to the refiners, plate workers, or merchants, depended on whether the market price of bullion were higher or lower than the Mint price. Hence the goldsmiths were

very soon held responsible for the debasement of the coinage. "Apperceiving the new coin of gold to be better than the new coin of silver that was made to countervalue it, they picked out all the gold as fast as it came forth of the Mint and laid that aside for other uses, so that now we have but little more than the old current" ("Discourse of the Commonweal," 1549). It was on this ground also that Charles I in 1627 tried to re-establish by proclamation the work of exchanging coins as a royal monopoly :—"And whereas ourselves and divers of our predecessors have for some time past tolerated a promiscuous kind of liberty to all, but especially to some of the mystery and trade of goldsmiths in London and elsewhere, not only to make the said exchanges but to buy and sell all money or bullion, and from thence some of them have grown to that licentiousness, that they have for divers years presumed, for their private gain, to sort and weigh all sorts of money current within our realm, to the end to cull out the old and new moneys, which either by not wearing, or by any other accident, are weightier than the rest, which weightiest moneys have not only been molten down for the making of plate, etc., but even traded in and sold to merchants and strangers, etc., who have exported the same, whereby the consumption of coins has been occasioned, as also the raising of the silver even of our own moneys to a rate above what they are truly current for, by reason whereof no silver can be brought to our Mint but to the loss of the bringers, etc. For the reforming of all which abuses we have, by the advice of our Privy Council, determined to assume our said right, for our own profit and the good of the realm." The following year, as dissatisfaction was caused by the re-establishment of the office, the King published reasons to justify his action. The goldsmiths, he said, when the office of Royal Exchanger was dropped in the reign of Henry VIII, began "to leave off their proper trade of goldsmithrie, *i.e.*, the working and

selling of new gold and silver plate and manufacture, the sole intent of all their charters, to turn exchangers of plate and foreign coins for our English coins, although they had no right to buy any gold or silver for any other purpose than for their manufactures aforesaid, neither had any other person but those substituted by the Crown a right to buy the same. . . . They have raised the price of silver 2d. per ounce above the value of the Mint, which thereby has stood still ever since the eleventh of King James . . . that for above thirty years past it has been the usual practice of these exchanging goldsmiths to make their servants run every morning from shop to shop to buy up all weighty coins for the mints of Holland and the East countries, whereby the King's Mint has stood still." A petition against the revival of the office of Exchanger sent to the King by the Goldsmiths' Company of London and by the London Corporation had no effect, but the office was not continued after the death of Charles I, and then the work fell again into the hands of the goldsmiths.

In addition to their work as dealers in bullion and exchangers the goldsmiths were also the pawnbrokers of the time, and every goldsmith kept a retail shop for the sale of gold and silver plate, which could always be easily and quickly converted into coin if necessary. A German traveller in London in 1593 describes how he saw in Lombard Street "all sorts of gold and silver vessels exposed to sale, as well as ancient and modern coins in such quantities as must surprise a man the first time he sees and considers them." The wealth of Gresham, for example, who was one of the best known of the goldsmiths in the reign of Elizabeth, consisted chiefly of gold chains, and in the Civil Wars it was the plate of the nobility and gentry that helped to supply the King with money.

The reign of Charles I marks a period of transition in the history of the goldsmiths when, from being mainly

moneylenders and dealers in bullion, they became the bankers of the community, and received deposits on a large scale. In the early part of the seventeenth century merchants had been in the habit of depositing bullion in the Mint at the Tower, under the guardianship of the Crown, for security and convenience. In 1640 the King was in great need of money; he had bought up large quantities of pepper from the merchants on credit and had sold it for ready money at a great loss, and, as the proceeds were quite insufficient to tide him over his difficulties, he seized the money of the merchants in the Tower, to the value of £120,000. The merchants, who required this money to meet their own debts, remonstrated strongly with the Council, and finally agreed to let the King have £40,000, on receiving adequate security for its repayment with interest. This incident gave such a shock to public confidence in the royal credit that merchants in future preferred keeping their money at home to lodging it in the Tower. This change of custom, however, brought other difficulties in its train, for it meant that large sums of money had to be entrusted to clerks and apprentices, who were not always honest, and who sometimes made private and illicit profits by lending it out at interest to the goldsmiths unknown to their masters; and soon merchants began to adopt the plan of depositing money themselves with the goldsmiths, receiving interest for it, and having the right of withdrawing it whenever they pleased.

The work of the goldsmiths both as moneylenders and as bankers now greatly increased, and they made their profit by charging a higher rate of interest on money lent than that which they gave on money deposited with them. They frequently advanced large sums both to Cromwell and to Charles II at the rate of about 8 per cent., on the security of the taxes, thus enabling the Government to tide over the interval that had to elapse between the voting

and the collection of the taxes. The King, when he required money, sent for the goldsmiths and negotiated with them individually, each merchant stating the sum that he was able and willing to lend. To private depositors acknowledgments for the money received were given in the form of notes—the first kind of bank-notes issued in England—which passed freely from hand to hand, and which, as they were portable and could be easily traced, were found to be convenient instruments for trade. Some goldsmiths issued notes far in excess of the money they held, and were able to carry on a business by their credit; many of them made a considerable profit as well by discounting foreign bills.

An account of the work of the goldsmiths is given in a pamphlet, printed in 1676, entitled the "Mystery of the New-fashioned Bankers Discovered":—"Much about the same time—the time of the civil commotions—the goldsmiths (or new-fashioned bankers) began to receive the rents of gentlemen's estates remitted in town, and to allow them and others who put cash into their hands some interest for it if it remained but a single month in their hands, or even a lesser time. This was a great allurement for people to put money into their hands, which would bear interest till the day they wanted it, and they could also draw it out by £100 or £50 at a time as they wanted it, with infinitely less trouble than if they had lent it out on either real or personal security."

It was due in great measure to the goldsmiths that moneylending for business purposes was becoming much more general and that the old prejudice against usury was rapidly disappearing. Mun, in the tract "England's Treasure by Foreign Trade," quotes the old saying "that as usury increaseth, so trade decreaseth," but only to disprove it, declaring that, on the contrary, trade and usury rose and fell together. "For, although it is true that some men give over trading and buy lands or put out their

money to use when they are grown rich or old, or from some other the like occasions; yet for all this it doth not follow that the quality of the trade must lessen, for this course in the rich giveth opportunity for the younger and poorer merchants to rise in the world and to enlarge their dealings; to the performance whereof, if they want means of their own, they may, and do, take it up at interest: so that our money lies not dead, it is still traded. How many merchants and shopkeepers have begun with little or nothing of their own, and yet are grown very rich by trading with other men's money! Do we not know, that when trading is quick and good, many men, by means of their experience and having credit to take up money at interest, do trade for much more than they are worth of their own stock? By which diligence of the industrious the affairs of the commonwealth are increased, the moneys of widows, orphans, lawyers, gentlemen, and others, are employed in the course of foreign trade, which themselves have no skill to perform."

Considerable hostility was roused by the new system, and many of the money difficulties of the time were attributed to it. It had been recognized for a long time that the goldsmiths made a practice of melting down and exporting the heaviest coins for their own advantage, and this had often been a cause of complaint against them in earlier days, but now it was specially their work as bankers that was thought to be hurtful to the commonweal. Among others, Sir Dudley North and Sir Josiah Child wrote very bitterly against them. The former had unfortunately lost the first sum of money that he had been induced, with great reluctance, to deposit with them. The latter attributed to their influence the high rate of interest and the scarcity of money. The rate of interest was still limited by law, but from 10 per cent. in the reign of Henry VIII and 8 per cent. in the reign of James I, it was now reduced to 6 per cent.; some restriction was

necessary, for, as lenders were few, their practical monopoly would have enabled them to keep the rate exorbitantly high. As it was, Sir Josiah Child accused the goldsmiths of "being the main cause of keeping the interest of money at least 2 per cent. higher than otherwise it would be; for by allowing their creditors 6 per cent. they make moneyed men sit down lazily with so high an interest and not push into commerce with their money, as they certainly would do, were it at 3 per cent. or 4 per cent., as in Holland. This high interest also keeps the price of land at so low as fifteen years' purchase. It also makes money scarce in the country, seeing that the trade of bankers being only in London, it very much drains the ready money from all other parts of the kingdom." Thus the trade of banking "obstructs circulation, advances usury, and renders it so easy that most men, as soon as they can make up a sum from £50 to £100, send it on to the goldsmiths, which doth and will occasion, while it lasts, that fatal pressing necessity for money visible throughout the whole kingdom both to prince and people." The advantage of the new system, however, was so obvious that it took firm root and rapidly increased; its benefits were felt "every hour of every day in every part of London, and the people were no more disposed to relinquish those advantages for fear of calamities which occurred at long intervals than to refrain from building houses for fear of fires, or from building ships for fear of hurricanes" (Macaulay).

The political and financial difficulties of the reign of Charles II were, however, destined to ruin the credit of the goldsmiths, as those of Charles I had destroyed confidence in the Crown. In 1667, when the Dutch fleet was in the Channel, there was a run on the goldsmiths, because it was feared that in the event of a military catastrophe the King would be unable to pay his debts, but the excitement was checked by a royal proclamation

which restored confidence. Much more serious results followed the catastrophe of 1672. The goldsmiths were in the habit of depositing their surplus floating capital in the Exchequer, withdrawing it once a week as they required it to meet their engagements. In 1672 the King, then in great need of ready money, declared that payments from the Exchequer were to be suspended for a year; this meant that the money temporarily deposited by the goldsmiths with the Exchequer, amounting to £1,328,526, was appropriated for royal use, and the goldsmiths had to be content with a promise of interest at the rate of 6 per cent. This act caused widespread ruin, for, though the number of goldsmiths was small, the depositors who had placed their money with them, and whose interests were therefore involved, numbered 10,000; the principal was never repaid and the payment of interest was soon discontinued.

This event showed the necessity for a stronger basis of credit, and at the same time the need for some safe form of investment was very keenly felt. The hoarding of money was at this time very general; and when we hear, for instance, of the father of the Pope having a strong-box made to carry his fortune of £20,000 into the country in the form of specie, it is evident that the safe custody of wealth must often have been a serious problem. It was the financial difficulties of the Government, however, rather than the convenience of the people that was the immediate cause of the formation of a national bank, though its success was due mainly to the fact that it met a great national requirement.

The idea of the establishment of a bank was not new; it had arisen during the Protectorate, for it was at that time that the modern system of payment by cheques and bank-notes (issued by the goldsmiths) first came into pretty general use. It was the necessity of getting money for the French wars that led Montague, the Whig

statesman, to adopt the plan of Paterson for the formation of a national bank, and in 1694 the Company of the Bank of England was incorporated by charter in consideration of a loan to Government of £1,200,000 at 7 per cent.; the money was borrowed on the security of the Government, and the whole sum required was subscribed in a few days. The money, when collected, was handed in to the Exchequer, and the Bank obtained the funds which it required for carrying on its work from other sources. It was allowed by its charter to receive deposits and to trade with money deposited with it, deriving its profits from the circulation of the capital so formed. At first it paid interest of 3 per cent. or 4 per cent. to the depositors, while on the money lent to the Government it received interest at the rate of 7 per cent. or 8 per cent. Though allowed to transact private business, the Bank was not permitted to deal in anything but bills of exchange, bullion, or forfeited pledges, and was strictly forbidden to borrow or owe more than the amount of its capital, unless with special permission from Parliament; if this limit was exceeded, the members could be held liable in their private capacity. The affairs of the Bank were managed by a Governor, Deputy-Governor, and a Council of twenty-four directors, elected annually from among the members of the Company.

The advantages derived from the establishment of the Bank, both by the Government and by the public, were evident from the first:—"The erection of the famous Bank not only relieved the ministerial managers from their frequent processions into the City for borrowing money on the best and nearest public securities at 10 per cent. or 12 per cent. per annum, but likewise gave life and currency to double or treble the value of its capital in other branches of the public credit" (Paterson). The Government could get money more easily when it required it, and on better terms, and was in a much better

position when dealing with an institution recognized by the State than when it had been dependent in times of financial stress on the ability and readiness to help of individual citizens, who were mainly interested in making their own profits on the transaction. The establishment of the Bank strengthened the new dynasty and was a great financial aid to the Government during the wars with France. The public gained enormously from having a form of investment in which they could feel confidence, and William recognized the importance of this and urged upon Parliament the necessity of looking carefully after the public credit, "which cannot be preserved but by keeping sacred that maxim that they shall never be losers who trust to a parliamentary security." Moreover, the people appreciated the power of being able to withdraw money placed in the Bank at any moment, and the certainty that the money they received at the Bank would be of full value; for the goldsmiths had frequently issued clipped coin, even if they did not tamper with money deposited with them, and at the best of times the depositors were dependent on the solvency of the individual goldsmiths. Yet it was not to be expected that an institution of such importance could be started without initial difficulties and without arousing some opposition. The jealousy of the goldsmiths nearly wrecked it in 1696, and the opposition of the Tories, as the Bank was a Whig scheme, led to the attempt to establish a rival institution—the Land Bank—a little later. Even those friendly to the Bank thought at first that it could not be successful with so moderate a rate of interest as 7 per cent., and an institution so closely allied with Government it was feared by many might become an instrument of royal despotism. It was some years before the security of the Bank was generally acknowledged.

CHAPTER VI

LATER STUART PERIOD

At the Restoration all the Commonwealth coins were called in by proclamation, and from this time the coinage tends to become much less complex; many of the mediæval coins, such as the angel, the noble, the smaller silver coins, etc., had entirely disappeared from circulation by 1660 and the coin denominations became those of modern times. In the reign of William and Mary control of the coinage was handed over to Parliament by the King.

The most important change in the gold coinage was the introduction of the guinea. The guinea derives its name from the Guinea Company, formed to trade with the West Coast of Africa, whose charter gave them the privilege of having coins struck at the Mint in gold and silver from metal imported by them. In 1663, when they sent gold to the Mint, they received special permission to have their mark on the coins, and the symbol chosen by them—the elephant, and later the elephant on a castle—was stamped on the coin just below the King's head. Half guineas were struck as well as guineas, and also a few five-guinea and two-guinea pieces. The value of the guinea varied considerably during the next half century. It was intended to take the place of the sovereign, *i.e.*, to represent the value of the silver pound sterling in gold, and until the Revolution of 1688 it was current at 20s. In the reign of

William and Mary, when the silver coinage was very much depreciated, its value in silver money rose as high as 30s., and was only prevented by legislation from rising still higher; after the renovation of the currency it fell to 21s. 6d., and in 1717 to 21s., where it remained.

The silver coins issued for general circulation after the Restoration were only the larger denominations—5s., 2s. 6d., 1s., 6d. The smaller silver coins, from the groat to the penny, were issued only as Maundy Money, which was first struck in this reign to supply the means of conforming to the old custom of distributing royal bounty on Holy Thursday, and which has been continued ever since. Special marks were placed on some silver coins as well as on the guinea. Coins struck from metal imported by the East India Company were marked E.I.C.; coins struck from silver supplied by the South Sea Company bore the letters S.S.C.; the stamp of a rose denoted that the silver came from the West of England, whilst a plume showed that it came from the Welsh mines.

The copper coinage was established on a firm basis after the Restoration. In 1672 the coinage of copper halfpence and farthings was ordered, and the copper coinage was henceforth the work of the Government, though private individuals were still granted patents by the Government to issue copper coins as in the time of the earlier Stuarts. The traders' tokens, which had until this time been in circulation in defiance of any orders to the contrary because there had been such a dearth of small change, were now declared illegal and disappeared. In the reigns of James II and William and Mary some halfpence and farthings in tin were issued as well at the rate of 20d. for every pound weight of metal. The weight of copper coins varied at first with the price of copper, and was fixed a little later at 92 farthings or 46 halfpence to the pound avoirdupois.

The introduction of a copper coinage supplied a

pressing need, but inconvenience from the scarcity of small coins continued to be a difficulty for a long time, and this caused Locke, writing in 1691, to suggest the coinage of a large quantity of small silver coins below the value of sixpence "to answer all the fractions between sixpence and a farthing and thereby supply the want of small moneys, whereof I believe nobody ever saw enough common to answer the necessity of small payments, whether, either because there was never a sufficient quantity of such pieces coined, or whether because of their smallness they are apter to be lost out of any hands, or because they oftener falling into children's hands they lose them, or lay them up, so it is there is always a visible want of them, to supply which, without the inconveniences attending very small coin, the proposed pieces, I humbly conceive, will serve" Petty on the other hand thought that the coinage of small silver pieces was not to be recommended, because they were so apt to be lost and to be reduced in weight, even by ordinary wear and tear, "little of our old small money," he said, "is now to be seen and our groats are worn away (to the value of) three halfpence in metal"

At the Restoration the method of coining by the mill and screw, which had been attempted in the time of Elizabeth and used during the Commonwealth, and which had been for some time in use in France, was permanently adopted According to the old method of coining the work was done mainly by hand The metal when mixed with alloy was cast into bars, which were reduced by hammering to the required thickness and cut with shears. To get the impression of the device the means used were "rude and artificial, the sole expedient being to fix one die firmly in a wooden block, and to hold the other in the hand as a puncheon, when by striking the latter forcibly and repeatedly with a hammer the impression required was at length worked up" (Ruding). The

newer machinery consisted of a mill worked by horses, and the upper die was firmly fixed by a screw instead of being held in the hand: this screw "is worked by a fly, and forces that die which is attached to it with considerable effect upon the other die which is firmly fixed below" (Ruding). The improvement resulted mainly from the increase in force, which was now so great as to raise the impression at one blow. As the shape of the coins was now exactly circular, clipping could be more easily detected, and it was not so easy to counterfeit the coins.

After the Restoration the scarcity of money was for a time a great difficulty, and large quantities of gold coins were exported to the Continent. The difficulty was an old one, but it was met now in a new way. Hitherto the Government had made constant efforts, on the one hand to keep pace with the rise of prices by reducing the amount of metal in the coins, and on the other hand to prevent the outflow of money by forbidding exportation of the precious metals and by altering the ratio of gold to silver. Statesmen had now begun to doubt the advantage of this policy of regulation and no longer advocated State control of the mechanism of currency, and when this finally ceased the ratio between the metals was determined only by the natural automatic action of international trade. The object of the Government was still to encourage money to come into the country and to keep it there, but the means used to gain this end were different.

In the first years of the reign of Charles II a last attempt was made to keep to the old system, and proclamations were issued forbidding the exportation of precious metals and the buying and selling of metals at higher rates than those offered by the Mint. These measures proved ineffectual, and the Government, recognizing that the exportation of gold was due to the higher value placed upon that metal on the Continent than in England, determined to bring up the price of gold to the

level of the continental rates. The value of the guinea was consequently raised first to 22s. and then to 23s. 6d. Two years later, in 1663, the laws forbidding the exportation of bullion were suddenly withdrawn. "For as much as several considerable and advantageous trades cannot be conveniently driven and carried on without the species of money or bullion, and that it is found by experience that they are carried in greatest abundance (as to a common market) to such places as give free liberty for exporting the same, and to better and increase the current coin of the kingdom . . ." thus ran the preamble of an Act which abrogated the laws regulating the inflow and outflow of gold and silver. This Act, which established free trade in the precious metals, reflects the commercial traditions of Holland, but it was not allowed to be carried out freely, and far into the eighteenth century the Government tried to regulate the supply of the precious metals.

The influence of Holland is seen as well in the Act of 1666 abolishing seignorage. The charge for seignorage in 1660 had been 15s. on the pound troy of gold and 2s. on the pound troy of silver; this rate for gold had already been reduced in 1663, and the charge was now taken off altogether, the expense of coinage being defrayed by means of duties levied on certain commodities. The effect was, as had been intended, to encourage the flow of gold to the Mint; for, as the Mint was now thrown open, any one could bring metal there and have it converted free of charge into coin of a recognized weight and fineness. The effect on silver was not so noticeable, because even the removal of seignorage charges did not counterbalance the advantage gained by sending silver abroad. Hence the result of the change was that gold was now brought in plentifully to the Mint and that the preponderance of gold over silver in the currency was largely increased. For some time gold had been too highly rated in proportion to silver. As early as 1662

Sir William Petty had complained that the country was "pestered with too much gold," and in 1667, when silver, for which the English Mint would only pay 4s. 3d. an ounce, could be sold for 4s. 10d. in France or 5s. in Scotland or Ireland, there was little inducement to bring silver to the Mint. As a result the silver currency was soon discredited. A supply of good silver coins was annually issued by the Mint, but as the debased coins and the old hammered coins, which were mostly under due weight, were not withdrawn, hammered and milled coins were in circulation together, and it was inevitable that the good coin should leave the country and the bad be left behind.

Mun, in his tract entitled "England's Treasure by Foreign Trade," published in 1664, recognized this as the true reason for the dearth of silver money. "Yea, but say some men, If his Majesty raise the money, great store of treasure would be brought into the Mint from foreign parts, for we have seen by experience that the late raising of our gold, ten in the hundred, did bring in great store thereof, more than we were accustomed to have in the kingdom; the which as I cannot deny, so do I likewise affirm that this gold carried away all or the most part of our silver (which was not overworn or too light), as we may easily perceive by the present use of our moneys in their respective qualities: and the reason of this change is because our silver was not raised in proportion with our gold, which still giveth advantage to the merchant to bring in the kingdom yearly gain by trade in gold rather than in silver." Sir Dudley North, in his "Discourse on Trade," attributed the scarcity of coin mainly to the melting down of the new coins as soon as they were issued from the Mint, and thought that free coinage was partly responsible for the difficulty. "I call to witness the vast sums that have been coined in England since the free coinage was set up. What is become of it all? Nobody believes it to be in the nation, and it cannot

well be all transported, the penalties for so doing being so great. The case is plain; it not being exported, as I verily believe little of it is, the melting-pot devours all. Silver and gold, like other commodities, have their ebbings and flowings. Upon the arrival of quantities from Spain, the Mint commonly gives the best price; that is, coined silver for uncoined silver, weight for weight. Wherefore is it carried into the Tower and coined? Not long after there will come a demand for bullion, to be exported again. If there is none, but all happens to be in coin, what then? Melt it down again; there's no loss in it, for the coining costs the owners nothing. Thus the nation hath been abused and made to pay for the twisting of straw for asses to eat. If the merchant were made to pay the price of the coinage he would not have sent his silver to the Tower without consideration; and coined money would always keep a value above uncoined silver, which is now so far from being the case, that many times it is considerably under, and generally the King of Spain's coin here is worth one penny per ounce more than our new money."

By the reign of William and Mary the condition of the silver currency was so bad that internal trade was completely disorganized, and it was evident that a financial crisis was approaching. In 1690 a petition from the working goldsmiths was sent to the House of Commons, complaining that not only the East India Company but divers Jews and merchants had bought up great quantities of silver to carry out of the kingdom, giving for it 1½d. per ounce above the Mint value, which had encouraged the melting down of plate and milled coins, "whereby for six months past not only the petitioners in their trade but the Mint itself has been stopped from coining." The reason for the difficulty was partly the clipping and counterfeiting of the coins that had been going on since the Restoration, partly the expenses entailed by

the foreign wars of William III, partly the policy of the French King, who, finding that silver was scarce in France, raised the ratio 10 per cent., thus encouraging the importation of silver into France. As the melting down of milled money resulted in a profit of £25 on every £1,000, it is not surprising that there was very little good silver left in England.

Macaulay has given a graphic description of the depreciation of the coinage and of its effects on the country. "The horse in the Tower still paced his rounds. Fresh wagon-loads of choice money still came forth from the Mint and still they vanished as fast as they appeared; great masses were melted down; great masses exported; great masses hoarded; but scarcely one new piece was to be found in the till of a shop or in the leathern bag which the farmer carried home after the cattle fair. In the receipts of the Exchequer the milled money did not exceed 10s. in the £100. A writer of that age mentions the case of a merchant who, in a sum of £35, received only a single half-crown in milled silver. Meanwhile the shears of the clippers were constantly at work. The coiners too multiplied and prospered; for the worse the current money became the more easily it was imitated." Many were put to death for clipping and counterfeiting, but severity was of little use, for the number of those who made large fortunes with impunity in this way was considerable, and by 1695 it was a mere chance whether a shilling was worth 10d., 6d., or 4d. "The officers of the Exchequer weighed £57,200 worth of hammered money which had just been paid in; the weight ought to have been 220,000 oz. It proved to be under 114,000 oz. Three eminent London goldsmiths were invited to send one hundred pounds cash in current silver to be tried by the balance. Three hundred pounds ought to have weighed about 1,200 oz. The actual weight proved to be 624 oz.

The same test was applied in various parts of the kingdom. It was found that one hundred pounds which should have weighed about 400 oz. did actually weigh at Bristol 240 oz., at Cambridge 203 oz., at Exeter 180 oz., and at Oxford only 114 oz. There were indeed some northern districts into which the clipped coin had only begun to find its way. An honest Quaker, who lived in one of these districts, recorded in some notes which are still extant the amazement with which, when he travelled southwards, shopkeepers and innkeepers stared at the broad and heavy half-crowns with which he paid his way. They asked whence he came and where such money was to be found. The guinea which he purchased for 22s. at Lancaster bore a different value at every stage of his journey. When he reached London it was worth 30s., and would indeed have been worth more, had not the Government fixed that rate as the highest at which gold should be received in the payment of taxes." . . . "It may be doubted whether all the misery which had been inflicted on the English nation in a quarter of a century, by bad kings, bad ministers, bad parliaments, bad judges, was equal to the misery caused in a single year by bad crowns and bad shillings. The evil was felt daily and hourly in almost every place and by almost every class. Nothing could be purchased without a dispute. Over every counter there was a wrangling from morning till night. The workman and his employer had a quarrel as regularly as Saturday came round. On a fair day or a market day the clamours, the reproaches, the taunts, the curses were incessant, and it was well if no booth were overturned and no head broken. . . . The prices of the necessaries of life, of shoes, of ale, of oatmeal, rose fast. The labourer found that the bit of metal which, when he received it, was called a shilling, would hardly, when he wanted to purchase a pot of beer or a loaf of rye bread, go as far as sixpence. . . . The

ignorant and helpless peasant was cruelly ground between one class which would give money only by tale and another which would take it only by weight."

There were frequent discussions on the matter in Parliament, and as early as 1689 a Committee of the Commons had been appointed to look into the question, but without any result. Lowndes, the Secretary of the Treasury, who was asked to make a report on the matter, fell into the error of thinking that it was possible to alter the value of a coin by altering its name, or, in other words, that the purchasing power of a coin depended upon its name and not upon its real value :—"thus, making the pieces less, or ordaining the respective pieces (of the present weight) to be current at a higher rate may equally raise the value of silver in our coins." He set to work to prove this hypothesis, and his views had a good many supporters; but he found an able opponent in Locke, who had much sounder views on the question and put forward his arguments more clearly and directly than they had been put forward before :—"Raising of coins is but a specious word to deceive the unwary. It only gives the usual denomination of a greater quantity of silver to a less (*e.g.*, calling 4 grains of silver a penny to-day, when 5 grains of silver made a penny yesterday), but adds no real worth or real value to the silver coin to make amends for its want of silver. This is impossible to be done, for it is only the quantity of silver in it that is, and eternally will be, the measure of its value."

The same year, 1695, a practical scheme, suggested by Montague, was adopted. It was decided that the debased money should be called in and should be recoined according to the old standard of weight and fineness. To secure the return of the money to the Mint a time-limit was fixed, after which no debased money should be legal tender except in payments to the Government, and a further time-limit after which it would not pass at all,

and the Government would only take it at its bullion value The clipped money would be accepted in payment of the taxes until May 4, 1696, in advances to Government until July 1st, and would cease to be current after February 1, 1697 The Government undertook to give good money in exchange for bad at the full nominal value of the debased coin, hence the whole of the cost of the recoinage would fall upon the national Exchequer

There was almost a panic in the country when the scheme of the Government was known, and the summer of 1696, when the changes were taking place, was a very critical time, for the new money appeared very slowly and the stock of silver money in the country was so reduced that it was only with extreme difficulty that the ordinary retail business of the country could be carried on The scarcity of money is noted by Evelyn in his Diary —"*May* 1, 1696—Money still continuing exceedingly scarce, so that none was paid or received, but was all on trust, the Mint not supplying for common necessaries . *June* 11—Want of current money to carry on the smallest concerns even for daily provisions in the markets Guineas lowered to 22s. and great sums daily transmitted to Holland, where it yields more, and other treasure sent to pay the armies, and nothing considerable coined of the new, and now only current, stamp, cause such a scarcity that tumults are every day feared, nobody paying or receiving money." According to the account given by Macaulay, "the manufacturers generally contrived, though with extreme difficulty, to pay their workmen in coin The upper classes seem to have lived to a great extent on credit. Even an opulent man seldom had the means of discharging the weekly bills of his baker and butcher. A promissory note, however, subscribed by such a man, was readily taken in the district where his means and character were well known. The notes of

the moneychangers of Lombard Street circulated widely, and the paper of the Bank of England did much service." It was a period of great anxiety for the Government, but as it was a quiet time in other respects and nothing happened to disturb public confidence, the crisis passed off more quietly than had been expected. A free use was made of cheques and credit; Government securities were issued, known now as Exchequer bills, bearing interest at the rate of 3d. a day on £100, and, as the new money was gradually issued and put into circulation, the tension subsided.

During this period debased money was brought in to the value of £4,000,000, and it was found that almost the whole of this money had been coined between the reign of Edward VI and 1662, a proof that practically all the money coined since that date by the new method of the mill and screw had been melted down or exported. New silver money was coined to the value of £6,882,908; thus there was a loss of over £2,000,000, and the total cost of the recoinage to the Government has been reckoned at not much under £3,000,000—an enormous sum, taking into consideration the fact that the ordinary revenue of the country at that time did not amount to more than £2,000,000.

A reduction in the silver value of the guinea took place simultaneously with the reformation of the currency. Some alarm had been felt at the prospect of a sudden fall, and a petition was sent in to the Government by the butchers, graziers, etc., of Smithfield Market, on the ground that they still held many guineas which they had received as the equivalent of 30s. each, and that a sudden change in the value would ruin them. The reduction was consequently gradual; in February, 1696, the guinea was reduced from 30s. to 28s., and then fell by successive steps until by April 22nd it was fixed at 22s.

The effect of the restoration of the currency was satis-

factory for the moment; public confidence was restored, the foreign exchanges turned in favour of England, and money began to come into the country again. "The merchants in fact saw that the balance of trade was so much turned on our side that whereas we were wont to carry over a million of our money in specie, we then sent no money to France and had at least half that sum sent over to balance the trade" (Burnet). Yet the events of the eighteenth century were to show that, although the Government had carried through with apparent success a task of enormous difficulty, it had effected no permanent settlement of the currency, and difficulties from the scarcity of silver soon began again.

CHAPTER VII

THE COINAGE IN THE EIGHTEENTH CENTURY

VERY little change was made in the coinage in the eighteenth century. The only gold coins struck were the guinea and half guinea, and after 1717 they exchanged for 21s. and 10s. 6d. respectively and were valued unalterably at these figures. The last guineas were struck in 1813, and after that the guinea remained only as a money of account and its place in the currency was taken by the sovereign, which was current for 20s. and weighed a little over 123¼ grains. Gold coins valued at 7s.—the third of a guinea—were struck by George III, and a few £2 pieces by George IV, but with these exceptions the sovereign and half sovereign have been since 1813 the only gold coins in circulation. Throughout the eighteenth century no change was made in the silver currency, and the coins issued remained as before :—5s., 2s. 6d., 1s., and 6d. At the end of the reign of George II, when the silver coinage was scarce and in an unsatisfactory condition, Spanish dollars of the value of 5s. were accepted by the Mint and reissued countermarked with the head of the King, and in 1804 silver coins to the value of 3s. and 1s. 6d. were struck, but these were only temporary experiments. The copper coinage of the eighteenth century consisted of halfpence and farthings. Quite at the end of the century, in 1797, copper coins to the value of 2d. and 1d. were struck, but the twopenny pieces, being found to be

too large and heavy for convenience, were soon discontinued and for a time there was a return to tradesmen's tokens.

The eighteenth century was a time of difficulty in currency questions because gold was still overrated, for the reform of 1695 had been carried out on the principle of retaining the old standard, whilst the gold mines of Brazil were now being extensively worked and the market value of silver relatively to gold was advancing. Locke's advice had been to bring down the guinea until the Mint ratio between gold and silver was the same as the market ratio, but the Government only partially carried out his plan. The guinea had been lowered in value, but not sufficiently. Gold was still overrated with regard to silver as judged by the continental standard, and consequently the new silver coins began to leave the country, the influx of gold going on all the more rapidly because there was now a large supply of good silver coins which could be sent abroad to pay for it. By October, 1696, it was found necessary to pass a law checking the importation of gold, and it was also ordered by proclamation, as there was so much foreign gold current in the country, that the pistole and the louis d'or should not pass current for more than 17s., an order which had the effect of bringing them at once to the Mint.

In 1698 the guinea was reduced from 22s. to 21s. 6d. The ratio between gold and silver was now $15\frac{1}{2} : 1$, whilst in France and Holland it was $15 : 1$; and, though it was known that gold was still overrated, it was thought by the Council of Trade and Plantations that the charges for insurance and freight would counterbalance the difference and that "the present disproportionate increase of gold" would be checked. They were, however, mistaken, for, as the guinea at 21s. 6d. was still rated above its bullion value, it was more profitable to pay for goods in gold in England and in silver abroad, and so the full

weight silver coins soon found their way to the melting-pot. The Government had not hitherto realized that a ratio which was so favourable to gold was bound to be unfavourable to silver—there were even rumours afloat that the French gold was being sent into England as a bribe for political purposes—but in 1708 they recognized that the scarcity of silver was the result of having two different measures of value in existence side by side, and offered a premium of 2½d. per ounce to anyone who brought foreign silver plate or coin of standard fineness to the Mint before December, 1709. This inducement proved ineffectual, and a clandestine trade of exporting silver and importing gold continued, bringing in a profit to the individual of 15d. or 5 per cent. on every guinea.

The overvaluation of gold caused foreign gold coins to enter the country in great quantities and to circulate freely. Sir Isaac Newton reported in 1701 that "the great value put upon French and Spanish pistoles in England has made them of late flow plentifully hither, above all other sorts of gold, especially the French pistoles, which are better sized and coined and less liable to be counterfeited and by consequence of more credit than the Spanish. For pistoles pass among us for 17s. 6d. apiece, whereas with one another they are worth but about 17s. 1d. at the rate that guineas of due weight and alloy are worth 21s. 6d. . . . About four years ago by the English putting too great a value upon Scotch money the northern borders of England were filled with that money and Scotland with ours, the Scots making about 8 per cent. or 9 per cent. profit by the exchange until your lordships were pleased to put a stop to the mischief. This case being now the same (but of much greater consequence) in the course of exchange between English money and pistoles by the overvaluing of pistoles to the nation's loss, we thought it our duty to present it to your lordships in order to such a remedy as your lordships

shall think fit. We presume also to lay before your lordships that the great demand for silver for exportation and trade has raised the price of bullion above that of silver moneys 3d. or 4d. and sometimes 6d. or 7d. per ounce, and whereas moneys ought to be of as great or greater value than bullion by reason of the workmanship and certainty of the standard, this high price of bullion has not only put an end to the coinage of silver, but is a great occasion of melting down and exporting what has already been coined."

In 1717 the question was brought before Parliament. Sir Isaac Newton, then the Master of the Mint, whose advice was asked, reported that since 1702 gold had been coined to the amount of £7,127,835 and silver to the amount of only £223,380, of which £143,086 had been brought to the Mint in response to premiums offered. He attributed the difficulty to the overvaluation of gold, and showed that the guinea was valued at the Mint at 21s. 6d., whilst its real value was only 20s. 8d. according to the market ratio between gold and silver, and that silver for which the English Mint paid only 5s. 2d. an ounce was really worth on an average 5s. 4½d. an ounce. After examining the condition of the Mints on the Continent and comparing them with the English Mint, he states that "by the course of trade and exchange between nation and nation, in all Europe fine gold is to fine silver as 14·5 : 1, or 15 : 1, and a guinea at the same rate is worth between 20s. 5d. and 20s. 8½d. . . . and it appears from experience as well as by reason that silver flows from those places where its value is lowest in proportion to gold . . . and that gold is most plentiful in those places in which the value is highest in proportion to silver, as in Spain and England. It is the demand for export which hath raised the price of exportable silver about 2d. and 3d. in the ounce above that of silver coin, and hath thereby created a temptation to export or melt down the silver coin rather than give 2d. or

3d. more for silver; and the demand for export arises from the higher price of silver in other places than in England in proportion to gold, that is, from the higher price of gold in England than in other places in proportion to silver, and, therefore, may be diminished by lowering the value of gold in proportion to silver. . . . And if gold were lowered only so as to have the same proportion to the silver money in England which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any other part of Europe; and to compass this last there seems nothing more requisite than to take off 10d. or 12d. from the guinea; so that gold may bear the same proportion to the silver money in England which it ought to do by the course of trade and exchange in Europe." Newton also drew attention to the enormous quantity of silver exported by the East India Company—3,000,000 oz. for the current year—and pointed out that when ships had left for the East laden with silver, draining the scanty store that was already insufficient to supply the needs of the country, the market price of silver had temporarily risen as high as 5s. 6d. or 5s. 8d. per ounce. He suggested that the ratio should be altered so as to bring the English Mint rates into line with the rates on the Continent.

As a result the silver value of the guinea was lowered to 21s. The measure had little effect at first, because silver was hoarded by speculators in the hope that gold would be called down still further, and it was only after a resolution had been passed by Parliament in January, 1718, that the standard of the gold and silver coins should not be altered in future in fineness, weight, or denomination, that silver was brought to the Mint to be coined. The importance of the Act of 1717 lies in the fact that the value of the guinea was now definitely and permanently fixed, for this was the last alteration made by Government in the relative value of gold and silver. The price of gold

was now fixed at £3 17s. 10½d. per ounce, and the ratio of gold to silver was $15\frac{14205}{68200}$: 1. In France and Holland the ratio was 14½ : 1, and so gold in England was, as compared with these countries, still overvalued to the extent of about 4d. in the guinea, and consequently it was still profitable to make large payments in gold in England and to export good silver money almost as soon as it left the Mint, leaving only debased coin in the country. Thus, as in the case of Locke, the suggestions of Newton had only been partially adopted by the Government. Yet, however debased the silver coinage became after this, 21s. would always be a legal exchange for a guinea; and, though gold bullion was overrated relatively to silver bullion, gold coins were not overrated relatively to silver coins because the silver coins that remained in the country were so debased. The debased silver did not drive the gold coins out of the country, because the good English silver coins that were regularly issued by the Mint were the cheapest coin to use for payments abroad and were mainly employed for that purpose.

The difficulty was increased by the prevalence of coining and clipping—coining, it may be noticed, was the work mainly of men of the lower classes, whilst clipping was carried on by men of all classes, and especially by many middle-class men of good position and reputation. The work of coining seems to have been recognized as a lucrative employment, and in 1767 in the Yorkshire Dales a central body of coiners formed themselves into a kind of banking company, with whom certain capitalists deposited large sums of money in the form of guineas in order to have them clipped, sharing the profits with the coiners. A small rim with the original milled edge was cut off, and the edges were milled again by being pressed on a file; by this means guineas were reduced in value by about one sixth, and the clippings were recoined to represent Portuguese coins, mainly moidores, which

passed current for 27s. and contained gold to the value of 22s. The coiners in this way could make a profit of 27s. on seven good guineas passing through their hands. This work was carried on with very little secrecy; the Government knew of it, but little effort was made to check it. Portuguese coins, which came very freely into the country as a result of the Methven Treaty of 1703, were so easily counterfeited that people were afraid to accept them after a time at their nominal value. Even at the Bank itself it was possible for these malpractices to be carried on, for we read of one William Guest, a teller of the Bank of England, who filed the guineas in his charge, making a newly milled edge with an ingenious machine invented by himself, and who had accumulated nearly five pounds weight of gold filings before he was detected and punished.

By the second half of the eighteenth century the state of the coinage was again a source of anxiety to the Government. By 1760 all silver money was very scarce. Crown pieces had almost disappeared, though they had been coined to the extent of one and a half millions since 1698; only defaced and depreciated half-crown pieces were left; shillings were found to be deficient in weight by between 6 per cent. and 11 per cent., and sixpences by between 11 per cent. and 22 per cent., and both shillings and sixpences were so defaced as to have lost all impression. The difficulty about the ratio had gradually righted itself because the value of gold bullion had been rising all over Europe relatively to silver. In 1757 the ratio on the Continent had been 14½ : 1 as against 15 : 1 in England, whilst by 1773 the continental ratio had overtaken the English and the market price of standard silver was now 5s. 2d. per ounce, which was the same as the English Mint rate. As a result, the profit which had hitherto been gained on the exportation of silver disappeared.

The eighteenth century was marked by a progressive deterioration of the gold coinage, which was deficient in weight as much as 9 per cent. on an average, and the market price of gold bullion had risen to £4 12s., thus differing considerably from the English Mint rate of £3 17s. 10½d. To improve the condition of both the gold and the silver coinage, an important measure of reform was brought in in 1774, but it dealt much more effectually with gold than with silver. The great innovation made by this Act was that for large sums coins were to be legal tender by weight and not by tale only. Hitherto all coins issued by the Mint had been legal tender whether they were of standard weight and fineness or not, unless declared by proclamation to be otherwise. In all commercial transactions the seller was obliged to take the coins at the rate at which they were declared by the Government to be current; heavy penalties were inflicted in case of refusal, and Government sometimes attempted by legislation, though unsuccessfully, to prevent prices being altered in accordance with alterations in the value of coins. The weighing of gold coins was not altogether new. By the Act of 1587 public scales for weighing gold coins were provided in every town, but it is doubtful whether this had ever been strictly enforced, and the custom of weighing gold had for a long time fallen into disuse. By the Act of 1774 every gold coin that was under due weight was to be rejected, and was to be returned to the Mint by the person to whom it was offered in payment, the loss being borne by the owner. The principle that good coin drives out bad was understood by this time, and the object of the Act of 1774 was to prevent good and bad coins being in circulation together. As a preliminary step the deficient gold pieces were called in and recoined. Silver was not to be legal tender by tale for any sum above £25; after that it was only to be taken by weight at the rate of 5s. 2d. per ounce

of standard silver. Beyond prohibiting the importation of light silver coins no actual step was taken to improve the condition of the silver coinage, and it remained unsatisfactory for about twenty years longer; in 1787 half-crowns had depreciated 9 per cent., shillings 24 per cent. and sixpences 38 per cent. Little attention was paid to the state of the silver coinage by the Government, as it no longer caused international embarrassment, though it entailed difficulties at home.

This Act was not taken very seriously by the public; to carry it out strictly it would have been necessary to weigh every gold piece offered in payment; and without any definite records on the subject, we may feel fairly certain that this was not done, and that the only gold coins rejected were those about whose debasement there could be no doubt. The Act was only passed for a term of years, and when this term expired it was not renewed; yet it was very important, for the possibility of enforcing it prevented the gold coinage falling appreciably below its nominal value.

The issue of French assignats in 1792 caused a temporary drain of silver to France; 2,909,000 oz. of English silver were sent to France to buy assignats, and in order to supply the deficiency the Government again had recourse to the plan of reissuing Spanish dollars stamped with the hall mark of the King's head. As soon as the assignats became depreciated their effect was reversed; the good silver money, driven out of France by depreciated paper currency, came over to England, and the exchanges with France turned in favour of England.

At the end of the century the value of gold was rising in Europe considerably, and not only was it no longer profitable to export silver, but the Government feared that gold would be exported and that the country would be swamped with silver. It was not the importation of silver

but the possibility of the exportation of gold that caused alarm; and in 1798 Government, in the hope of averting this danger, passed an Act forbidding silver to be brought to the Mint, and this practically closed the Mint to silver as far as the general public were concerned. The great scarcity of coin, and especially of silver, that marked the close of the eighteenth century and the beginning of the nineteenth, was due partly to this measure, but mainly to the excessive issues of paper money which resulted from the suspension of cash payments by the Bank in 1797.

Before long bank-notes became depreciated, and as a depreciated paper currency has the same effect as a depreciated metallic currency, good money was either hoarded or driven out of the country. Between 1801 and 1810 the exportation of silver was the heaviest ever experienced, and the result was to cause a deficiency of the silver coin almost as serious as before the recoinage of 1694. The working classes suffered severely from the dearth of small change, for men were often paid in one-pound notes, for which they found it impossible to get change to make their weekly purchases, while the Government found it difficult to get coin to pay the seamen in the Navy and the workmen in the docks. "Not only your Majesty's sailors and your own artificers are in want of legal silver coins, the labourers in every part of the country, and the manufacturers in the great and populous towns of the kingdom and all your good people in every part of it, and particularly the inferior classes, suffer equally from want of them" (Lord Liverpool).

Bankers found it so difficult to pay the odd money on cheques that a circular appeared in the London papers asking customers to draw for whole pounds only, whilst in many public offices change was refused and certain clerks in these offices made considerable profits by supplying customers with change, and parting with small

coins only on payment of a substantial commission. During this period, when all the good silver coin was either melted down or exported, the minted coinage that remained in the country was deficient in quality as well as in quantity. Only the thinnest and most worn silver coins were in circulation, and many of them were so defaced that identification was impossible.

To meet the difficulty token coins were freely used both by the Bank and by private traders. The authorities of the Bank knew that the Government had a large stock of silver dollars that had been taken from Spain, and it was decided to stamp these with the King's head and put them into circulation, allowing them to pass current at the rate of 4s. 9d. As notes were at a discount and the Bank was not allowed to pay gold for them, the people were eager to get coin in any form, and as soon as the dollars appeared it was besieged by applicants for them, but, as the supply seemed to be practically inexhaustible, the excitement soon subsided. Difficulties soon arose from two causes—from counterfeiting and from a change in the value of silver. The bullion value of the dollar was only 4s. 8d., though it circulated at 4s. 9d. to defray the cost of stamping and re-issuing, and dealers, finding this out, got a supply of Spanish dollars and stamped them themselves, thus gaining a penny on every dollar. When silver rose, and the bullion value of the dollar consequently exceeded its face value, the coins were naturally melted down, and to avoid this difficulty the Bank, which in 1811 had issued a fresh supply of dollars current at 5s., agreed to receive them back at the increased value of 5s. 6d. In the same year it issued as well silver tokens for 3s. and 1s. 6d.—all made from silver dollars; for some years these coins formed the principal part of the metallic currency for London and many parts of the country, and in a return made to the House of Commons by the Bank it was estimated that the issues had reached the total sum of

£4,457,649 between the years 1804 and 1815. Counterfeiting was very prevalent again just at the end of this period, for by 1815 the bullion value of the dollars had fallen to 4s 3d, and, as the Bank was still issuing and accepting them at 5s 6d, a great number of these coins were imported and stamped to resemble bank dollars About 1811 a general custom of issuing private tokens sprang up in all important towns Many merchants and bankers issued their own, and it was the general practice to make six pieces of the nominal value of one shilling out of the five-shilling dollar, often cutting the dollar ingeniously into six parts for the purpose The demand for dollars for the manufacture of these private tokens was so great that they were imported freely from the colonies —more especially from the British West Indies, greatly to the inconvenience of the colonists—and in several colonies the coins were defaced and allowed to pass current for more than their actual value in order to check exportation All these tokens were freely accepted while the scarcity of coin was at its height, but the public had little real confidence in them, as they were often of so little intrinsic value—a token of the nominal value of one shilling being found on assay to be worth only 8½d or 8d—and in 1812 an Act was passed prohibiting the further issue of private tokens and making the tender of such coins illegal after March 25, 1813

It was not until after the passing of the Act of 1816 that the coinage was restored and new money was issued. For a time there was almost a panic in the country, for people feared that they would have to suffer a loss on the worn coins which they held, and to restore confidence the Lord Mayor issued a notice to the effect that the Bank would receive at their full nominal value any English coins, however worn they might be There was some trouble in the country districts, and the new silver coin, when it was issued in 1817, had to be sent into the provinces

guarded by artillery. "Twenty-three artillery train waggons loaded with new silver coin left London for the North. Three, upon arriving, deposited their lading, amounting to some twenty-four thousand pounds, with the bankers of York; each waggon was drawn by six horses and accompanied by a military escort." "On January 30th eighteen artillery waggons passed through Newcastle on their way to Scotland; they were under a full military escort. They were laden with silver which was recorded as 24 tons."

The eighteenth century was marked by the disappearance of the mercantile theory as a factor in practical politics, and the Government not only ceased its efforts to keep, in the national interest, a large stock of bullion in the country, but ceased as well to try and regulate the balance of trade with the object of ensuring an excess of exports over imports. After the Restoration an attempt—though a somewhat premature attempt—had been made to get free trade in bullion, and, among others, Petty spoke in favour of the repeal of the laws prohibiting the exportation of bullion on the ground that they "were perhaps against the law of nature and also impracticable," for "we see that the countries which have forbid these exportations under the highest penalties are very destitute both of money and merchandise." The development of banking had proved that it was not necessary for the individual to keep large stores of bullion in order to be economically prosperous, and he compared a country with large supplies of coin and bullion to a man who had hoarded his wealth instead of putting it into circulation and using it to the best advantage. A country, he says, is not necessarily poorer for having less money:—"For as the most thriving men keep little or no money by them, but turn and bend it into various commodities to their great profit, so may the whole nation also, which is but many particular men united."

It was, however, Adam Smith who gave the most complete refutation of the mercantilist arguments and taught juster views of the nature and function of money. "That wealth consists in money, or in gold and silver, is a popular notion, which naturally arises from the double function of money as the instrument of commerce and as the measure of value . . . but it is not because wealth consists more essentially in money that the merchant finds it generally more easy to buy goods with money than to buy money with goods, but because money is the known and established instrument of commerce for which everything is readily given in exchange, but which is not with equal readiness to be got in exchange for everything. . . . Goods may serve many purposes besides purchasing money, but money can serve no other purpose besides purchasing goods. . . . It is not for its own sake that men desire money, but for the sake of what they can purchase with it." Though recognizing that money must always form part of the national capital, he shows that it is only "a small part—and the most unprofitable part of it," and that "the expense of purchasing an unnecessary quantity of gold and silver must, in every country, as necessarily diminish the wealth which feeds, clothes and lodges, which maintains and employs the people." The expenses of the recent war with France, he said, were certainly not paid for by the exportation of bullion, but by the exportation of other commodities, and on the other hand he shows that the exportation of bullion for purposes of legitimate trade does not necessarily decrease the amount of money in the country, as the volume of trade is thereby increased. He points out, too, that the quantity of the precious metals, like that of every other commodity, will naturally regulate itself in accordance with the effective demands for it, and that if the quantity of the metals in a country exceeds this effective demand, no amount of vigilance on the part of the Government

will prevent their exportation. Thus he was in favour of removing all restrictions and of allowing absolutely free trade in bullion as well as in other commodities.

Long after the theory that a large supply of money was essential for national safety had disappeared, there was a general idea that an increased supply of money was economically beneficial on the ground that it raised prices and stimulated trade and industry, whereas it is now generally acknowledged that it is only in the short interval between the acquisition of the fresh supplies of money and the rise of prices that a stimulus is given to enterprise. Jacobs holds that the impulse given to productive powers would last just as long as the increase of the precious metals should continue to lessen their value to other commodities. It must also be remembered that a fall in the value of money always benefits certain classes at the expense of others; it benefits the debtor at the expense of the creditor and reduces the burden of fixed charges of all kinds: "Such a change will benefit those who live by current labour; it will injure those who live upon the fruits of past labour, whether their fathers' or their own" (Chevalier).

As the precious metals were coming to be regarded less from a political and more from a purely commercial point of view, economists began to consider the amount of money that a country required. Both Locke and Petty thought it possible to estimate the amount required fairly definitely. Locke certainly allowed that, though the amount of money must bear some proportion to trade, the exact proportion was difficult to determine, because it depended on rapidity of circulation as well as on quantity, and "the very same shilling may at one time pay twenty men in twenty days, at another rest in the same hands for a hundred days together." He estimated roughly that a country would require one fiftieth part of the labourers' yearly wages, one fourth part of the landholders' yearly

revenue, and one twentieth part of the traders' yearly returns in ready money. Petty went into even more elaborate detail. "If there be six millions of souls in England and that each spendeth £7 per annum, then the whole expense is £42,000,000, or about £800,000 a week; and consequently, if every man did pay his expenses weekly and that the money could circulate within the compass of a week, then less than £1,000,000 would answer the ends proposed. But forasmuch as the rents of the lands in England (which are paid half yearly) are £8,000,000 pounds per annum, there must be £4,000,000 to pay them. And forasmuch as the rent of the houses of England paid quarterly is worth about £4,000,000 per annum, there needs but £1,000,000 to pay the said rents; wherefore £6,000,000 being enough to make good the three sorts of circulations above mentioned, I conceive what was proposed is competently proved, at least until something better be held to the contrary."

Adam Smith, writing nearly a century later, makes no attempt to estimate the quantity of money required, thinking that under ordinary circumstances the supply will adapt itself naturally to the commercial needs of the community. "The gold and silver which can properly be considered as accumulated or stored up in any country may be distinguished into three parts; first, the circulating money; secondly, the plate of private families; and last of all, the money which may have been collected by many years' parsimony, and laid up in the treasury of the prince. It can seldom happen that much can be spared from the circulating money of the country; because in that there can seldom be much redundancy. The value of goods annually bought and sold in any country requires a certain quantity of money to circulate and distribute them to their proper consumers, and can give employment to no more. The channel of circulation necessarily draws to itself a sum sufficient to fill it, and never admits any more."

The complexity of the subject, as explained in the following quotation from Walker, was not realized until a much later date: "The amount of money which any country should possess, or to put it otherwise, will possess under the free operation of the laws of distribution, depends not alone upon the amount of its trade, the number and frequency of payments to be made, but also upon the habits of the people, commercial and even domestic; upon the degree in which credit exists between man and man and between city and city; upon the efficiency of the laws for the collection of debts; upon the amount of travelling which takes place (for the traveller, notwithstanding the letter of credit, uses more money for a given expenditure than the stay-at-home) . . . upon the commercial and banking organization which exists. Hence in respect to no community can we say, in advance, what amount of money it should possess."

CHAPTER VIII

PAPER MONEY IN THE EIGHTEENTH CENTURY

THE history of the Bank for the first century of its existence shows that the nature of credit and of paper money was very imperfectly understood. Financiers did not grasp the fact that if credit was to be maintained it was necessary not only that there should be substantial wealth behind it, but that it should be possible easily and quickly to convert it into coin. They also failed to grasp the relation between paper money and metallic money. Metallic money has intrinsic value in itself, quite regardless of the Government stamp which is placed on it as a guarantee of this intrinsic value; paper money has no value in itself, but only represents value and is merely a promise to pay coin to a certain amount. The Government stamp does not create value, and in the case of notes it is merely a guarantee that coin will be paid to the amount for which the note is issued. If notes are issued in such quantities that people doubt whether there is sufficient coin in the Bank to cash them, they will become depreciated; or, in other words, losing faith in the note as a promise to pay in coin, people will prefer to receive coin rather than paper money, and if they anticipate any difficulty in converting notes into coin they will not accept them at their nominal value. For example, in the early part of the nineteenth century, though the nominal value of a bank-note was 20s., it would

not exchange for more than 15s. 11d. in coin. Hence bank-notes become depreciated if they are issued in excessive quantities, entailing uncertainty about their conversion into coin on demand, and the effect is the same as in the case of a depreciation of the metallic currency:—the notes are worth less than their nominal value, full weight coins are driven out of the country, the exchanges fall, and prices of all articles, including bullion, rise in consequence.

The first important development in the history of the Bank was the grant of a monopoly in consequence of the attempt of the Tories to establish the Land Bank as a rival to it. The Bank of England was a Whig institution, and the main object of the Tories in forming the scheme for the Land Bank was to harass their political opponents. The Government was in need of money, and Harley proposed to form a company on much the same principle as the Company of the Bank of England, and to advance £2,500,000 to Government at 7 per cent. interest; the payment of the interest was to be secured by a tax on salt, and the bank was to lend money to landowners on mortgage at 3 per cent. Thus the landowners and farmers, who would get financial help from the bank, would invest in it not actual money, but a mortgage on land, and the scheme was doomed to failure from the first: for, though land is worth money, it cannot always be quickly and easily converted into coin. However, this was not realized at first; the Land Bank was founded by Parliamentary authority to provide the capital required by the Government, and subscription lists were opened in May at Mercers' Hall. As the total amount subscribed was only £2,100, the scheme fell through.

The money which the Government had failed to obtain from the Land Bank was advanced by the Bank of England, though the Bank felt, and with good cause, that it had been badly treated by the Government, for its

position had been temporarily endangered by the proposed establishment of a rival institution and Bank Stock had fallen from £107 to £83. There was still a great scarcity of money, as the new coins came out too slowly from the Mint, and, just when the scarcity of money was at its height, an attempt was made by the goldsmiths to ruin the Bank. Bank-notes were payable on demand to the bearer, and the Bank, which had received the debased coin at its nominal value, was bound to cash notes presented to it in the new money as soon as it began to come out. The goldsmiths, who were jealous of the Bank, though they were still allowed to carry on their business in the same way as before, collected bank-notes to the value of £30,000 and suddenly presented them for payment on May 5, 1696. The Directors, knowing that their object was to ruin the Bank, refused payment of this extraordinary demand, though still for a time continuing to cash the notes of their ordinary customers. A little later, however, the scarcity of silver was so great that they were obliged partially to suspend payment; they gave notice first that they could only pay 10 per cent. on their notes once a fortnight, and then only 3 per cent. every three months. By August, 1696, the exchanges were at par again, and, as Bank Stock did not fall, public confidence in the Bank does not seem to have been shaken. Throughout this crisis the Government had supported the Bank, pledging itself to pay £60,000 a week of the new money until the coinage was completed.

The position of the Bank was now more assured, and negotiations were entered upon for a second loan to be advanced by it to the Government at a high rate of interest. It was permitted to consider this Government debt as part of its capital, and the terms of its charter were now altered.

Parliament agreed to allow the Bank to receive fresh subscriptions to the extent of the loan advanced to

Government; the new subscribers were to be incorporated with the proprietors of the old stock, and the Bank was allowed to issue notes to the extent of the new capital subscribed, though it was strictly forbidden to issue notes in excess of that amount. It was also declared that during the continuance of the Corporation, no other bank nor any "corporation, society, fellowship, company or constitution of the nature of a bank" should be "erected, established, permitted, suffered, countenanced or allowed by Act of Parliament within the kingdom." The monopoly granted by this clause was strictly limited, for it did not prevent the establishment of private banks, but only provided that no other banks should be established by Parliamentary authority. In 1709, when the Government was again in pecuniary difficulties, and the produce of the taxes was insufficient by about one half to meet the demands on them, the Bank, on consideration of advancing another loan, was allowed once more to double its capital, and its privileges as a corporation were extended for twenty-one years from August, 1711. The terms of its monopoly were also altered, to the effect that, during the continuance of its charter, no body politic or corporate whatsoever, or partnership with more than six members in England, should issue notes payable on demand or at any less time than six months after issue. The object of this clause, which was renewed with the renewal of the Bank Charter in 1742, was not to prevent the establishment of new banks, but the establishment of any bank that might prove a rival to the Bank of England. Unrestricted rights of issuing notes were left to private banks with less than six partners, and there was also nothing in the clause to prevent any joint-stock bank being formed which should not issue notes, or which should issue notes payable only at six months or more after issue. It must be remembered, however, that the issue of notes was thought in the eighteenth century to form the chief part

of the work of a bank, and it was not thought likely that banks would be formed subject to these restrictions.

In 1720 the Bank found itself again threatened by a rival—this time by the South Sea Company, which had been formed in 1711, at a time when public credit had been severely shaken by the fall of the Whigs, with the object of lending money to the Government; in return it had been granted the monopoly of the trade in the South Seas. In 1720 alarm was caused by the rapid increase of the National Debt, and the King, in his speech from the throne, recommended the Commons to consider "proper means" for reducing it. Various schemes were suggested, and the plan brought forward by the South Sea Company was adopted by the Government. The Company offered to take over all the debts of the State, estimated at £30,981,712, receiving interest at the rate of 5 per cent. before 1727 and 4 per cent. after that date; it also undertook to pay the Government a lump sum of £3,500,000, which was afterwards raised to £7,500,000, and in return further trade privileges were granted to it. Moreover, it was to become the sole State creditor, as the funds of the Bank, the Exchequer, and the East India Company were to be incorporated with its own funds. To get the ready money that would enable it to carry out this gigantic scheme successfully the Company relied on subscriptions from the general public; and as exaggerated rumours were spread of its prosperity—8 per cent. interest being definitely promised to investors and 50 per cent. profits confidently expected—people flocked to buy shares in it, and its stock rose rapidly from £310 in January, 1720, to £890 in the early part of June, and to £2,000 at the end of the month. The hope of getting wealth quickly led to a mania for speculation on the part of the public, and, taking advantage of this, many other companies were formed, some of them for legitimate purposes of trade, but most of them either unpractical or fraudulent. "The whole

nation was infected with the spirit of stock-jobbing to an astonishing degree. All distinctions of party, religion, sex, character and circumstance were swallowed up in this universal concern, or in some such pecuniary project. Exchange Alley was filled with a strange concourse of statesmen and clergymen, churchmen and dissenters, Whigs and Tories, physicians, lawyers, tradesmen, and even with multitudes of females. All other professions and employments were utterly neglected, and the people's attention wholly engrossed by this and other chimerical schemes, which were known by the denomination of bubbles. New companies started up every day under the countenance of the prime nobility. . . . About a hundred such schemes were projected and put into execution, to the ruin of many thousands. The sums proposed to be raised by these expedients amounted to £300,000,000 sterling, which exceeded the value of all the lands in England. The nation was so intoxicated with the spirit of adventure that people became a prey to the grossest delusion" (Smollett).

The *London Journal* for June 11, 1720, shows the extent to which this "commercial lunacy," as it has been called, was carried. "The hurry of our stock-jobbing bubblers has been so great this week that it has exceeded all that was ever known. There has been nothing but running about from one coffee-house to another and from one tavern to another, to subscribe without examining what the proposals were. The general cry has been, 'For G—'s sake, let us subscribe to something, we don't care what it is!' So that, in short, many have taken them at their words, and entered them adventurers in some of the grossest cheats and improbable undertakings that ever the world heard of; and yet by all these the proprietors have got money and have had their subscriptions full as soon as desired." The violent reaction that was bound to follow this period of excitement was

hastened on by the action of the South Sea Company itself, which obtained a writ from the Lord Justice dissolving all the Bubble Companies to the number of about eighty-six. General uneasiness was caused, and the rapidly spreading alarm and the failure of confidence and credit involved the South Sea Company itself in the general ruin. No one would invest, everyone wanted to withdraw his investments and to realize at once, and, though the South Sea Company remained solvent, its shares by the end of September had fallen to £175, and it was evident that it would never be able to fulfil the extravagant promises held out when the stock was high. The original scheme which had given rise to the speculation in the first instance was dropped, and again, as in 1696, the Government had to have recourse to the Bank of England. The Bank, in the early part of the year, had already made offers to the Government, and had been willing to advance money on terms very similar to those offered by the South Sea Company, but they had not been accepted, and considerable resentment had been felt by the friends of the Bank at this treatment of a body which had done so much for the State. Yet in the general failure of credit that was the inevitable result of the mania for speculation roused in this year, the Bank of England was approached, and at a General Court the Governor and Directors were empowered to make an arrangement with the South Sea Company, and to accept their bonds in the hope of sustaining the credit of the country.

In 1745 the Bank was endangered by the Jacobite revolt. Its interests were so closely involved with those of the State, that, when a successful invasion was feared, creditors poured into the Bank to cash their notes, knowing that if the Stuart dynasty returned there would be little chance of the Government either paying interest on money advanced or returning the principal. At this crisis, payment was not refused by the Bank, and by a ruse it

was able to retain its specie as well. Customers were paid in rotation, and the Bank employed its own agents to enter with notes and paid them mostly in sixpenny pieces; these agents, as soon as they received the money, left with it by one door and brought it back by another, and meanwhile the *bona fide* holders of notes were unable to get near enough to the counter to present them. The panic, however, was of very short duration; and even before it was over the London merchants called a meeting, where they expressed their confidence in the Bank, and passed a resolution to the effect that "We, the undersigned merchants and others, being sensible how necessary the preservation of public credit is at this time, do hereby declare that we will not refuse to receive bank-notes in payment of any sum of money to be paid to us, and we will use our utmost endeavours to make our payments in the same manner." There has been no other instance of a run on the Bank caused by fear of invasion, but more than once an attack on it was feared in times of disturbance, more especially during the Gordon Riots of 1780, when, as a precautionary measure, old inkpots were melted down to cast into bullets; but a volunteer corps of London citizens was formed in its defence, and the mob being unprepared to deal with a resolute resistance, the attack was soon checked.

Considerable difficulty was caused in the eighteenth century by the prevalence of crime—the result of a defective and obsolete police system; bank-notes fell an easy prey to both the thief and the forger, and the insecurity of the roads made the remittance of either specie or notes a matter of considerable risk. Bankers had their choice of sending their remittances by their agents, who were constantly robbed, or by coaches, which ran almost equal risk of attack from highwaymen. Robberies were so frequent that in 1738, as the result of representations made by the Postmaster to the Bank,

the Directors advertised an issue of bills payable only after seven days, so that "in case of the Mail being robbed, the proprietor may have time to give notice." In 1758 a highwayman stopped the Worcester coach at Shepherd's Bush and stole a quantity of bank-notes which he got rid of gradually to the postmasters along another route, and in 1772 the proprietors of many of the coaches gave notice that they refused to convey "money, plate, jewellery, or watches." Matters were somewhat improved after 1784, when mail coaches began to run. The idea was that the mails should be carried by a special coach, guarded by several armed men, carrying no outside passengers and travelling at a speed of eight or nine miles an hour. Henceforth robberies of letter-bags were less frequent, and bankers preferred to send their parcels to London through the Post Office rather than by special agents. The postal authorities, however, did not regard this plan favourably, as they were not anxious to give highwaymen any additional temptation to attack the mail coaches. For the sake of safety it was ordered that drafts and notes sent through the post should be cut in half, with the number and date stamped on each part, for the purpose of identification.

Forgery was very frequent in the early days of banking in spite of the attempts made by Government to check it. In 1729 the forgery of bills of exchange and of goldsmiths' or bankers' notes above the value of £5 was declared to be felony, and the offender was to be burnt in the hand or transported at the pleasure of the court; some time later the forgery of bank-notes was made a capital offence. Severity seemed to have had no effect in reducing the evil, probably because so many of the offenders were able to escape punishment and to make considerable profits. Between 1801 and 1810 notes to the value of over £101,000 were refused as being forgeries, when presented for payment, and in 1818 it was estimated that notes to the

value of £30,000 were forged every year. Between 1805 and 1818 501 convictions were obtained and 207 persons were executed for forgery, at the cost to the Bank of nearly £250,000 in legal expenses.

Serious financial difficulties in connection with the paper currency arose towards the end of the century. It was not clearly understood what course the Bank ought to pursue at critical times when extraordinary demands were made on it. These demands might be due to one of two causes: (1) a temporary failure of public confidence in paper money when every one was wanting to convert paper money into coin, or (2) a demand for money for exportation in connection with an unfavourable condition of the foreign exchanges. In the former case the Bank ought to extend its issues of notes, for this is the only way in which public confidence can be restored; in the latter case, which is more serious, the Bank ought to restrict its issues, for the more it extends them, the more money will be available for exportation and the drain of specie will be increased. The period immediately following the close of the American War was a time of great apparent prosperity in Europe, for trade was expanding and new markets were opening; but it was also a time of overtrading and speculation, which was fostered by incautious issues from the Bank, and an alarming drain of specie resulted. The difficulty was at its height in May, 1783, when the exchanges were very unfavourable, and the demand for gold for exportation was so great that it seemed likely at one moment that the Bank would be obliged to suspend payment. The Directors, however, took the right course of contracting their issues until the exchanges turned in their favour again, and by October money began to come in from abroad and the crisis was safely tided over. There was another period of overtrading and speculation in 1793, but this time it was caused mainly by the reckless issues of the country

bankers, whose numbers had recently increased considerably.

After 1694, not only in London but all over the country the work of the goldsmith and that of the banker tended to become separate. It was open to any one to take up the work of banking and to issue notes, provided only that he could command sufficient confidence to enable him to circulate his notes freely, and provided that he kept within the limits of the Act of 1709, which forbade the establishment of a joint-stock bank or of a bank with more than six partners. Not many country banks had been formed before the American War of Independence, but after that their numbers rapidly increased. The latter part of the eighteenth century was a time of great industrial and commercial development; machinery was being invented, the coal and iron mines of the North were being worked, means of communication were improving and new markets were opened. The enormous industrial expansion required a corresponding extension of the currency, but this was difficult to obtain. There were no fresh supplies of the precious metals, and hence the expansion would have to take the form of a paper currency, but Bank of England notes had no circulation outside London, and the Bank monopoly prevented the formation of substantial banking firms. However, the country had to have a currency, and in default of a good one it had to be content with a bad one. "Multitudes of miserable shopkeepers in the country—grocers, tailors, drapers—started up like mushrooms, turned bankers, and issued their notes, inundating the country with their miserable rags. Burke said that when he came to England in 1750 there were not twelve bankers out of London; in 1793 there were nearly four hundred" (Macleod). These bankers received deposits, discounted bills and remitted money, and they issued notes recklessly and without making any attempt to have a proportionate

backing for their notes in cash. In one instance a bank was started by four partners, who subscribed capital to the extent of £500 each; in a few months they had a note issue of nearly £14,000, and in twenty years, whilst their capital had risen to £8,000, their note issue had expanded to £180,000. The only legal restriction imposed on the country banks was that in 1775 notes below the value of twenty shillings were prohibited, and after 1777 no notes could be issued for a smaller sum than five pounds. Every country banker had a London agent, and about 1790 many bankers allowed their bills to be cashed either in London, through their agents, or at the place of issue; and as a result so much country money was poured upon London tradespeople that country notes became discredited, and in the crisis of 1793 about one hundred country banks stopped payment and three hundred were seriously shaken. The Bank of England refused to come to their assistance with loans, fearing that its own supplies would run short and not realizing that, as the difficulty was due to a failure of public confidence, a free issue of money was necessary to restore it. Later in the year the Government intervened and stopped the panic by a large issue of Exchequer Bills. The real cause of the difficulty was the monopoly of the Bank of England, which prevented the establishment of country banks by powerful and wealthy corporations or partnerships. The Bank of England notes hardly circulated outside London and the Bank would not establish provincial branches itself; hence the work of banking in the country was in the hands of private men with very little capital at their back, who were quite unable to support a failure of public confidence and were bound to collapse in a time of financial stress.

The suspension of cash payments in 1797 was caused by the financial strain of the Revolutionary Wars. Enormous sums were needed to carry on the struggle with France

and to subsidize the English allies, and Pitt openly overrode the law which forbade the Bank to make any advances to Government without the consent of Parliament. The Act had been evaded before, and in 1793 Pitt had a Bill of Indemnity passed through Parliament, securing the Ministers from any legal action on that score; henceforth he felt that he had unlimited supplies to draw upon at home, and the amount spent on foreign subsidies increased from £2,641,053 in 1794 to £6,253,140 in 1795. The great exportation of money that resulted had the effect of raising the market price of gold considerably above the Mint price and of turning the exchanges against England; very soon they had fallen to such an extent that it was profitable to export gold, and money began to flow out of the country at an alarming rate. In the face of this difficulty the Bank ought to have acted as in 1783 and contracted its issues until the exchanges turned, but it did not understand the question. It was placed in a difficult position between the Government on the one hand, which was draining its resources for political purposes, and the commercial world on the other, which wanted money for trade; and, in the hope of satisfying both for the moment, it extended its issues instead of contracting them, though at the expense of endangering its own security. In the next two years financial difficulties steadily increased. In spite of the remonstrances of the Bank Directors and their assertion that they could lend no more money to Government, Pitt continued to promise subsidies to his allies and the stock of bullion was rapidly diminishing, until by February, 1797, it was found necessary to allow the Bank to suspend cash payments. A Bill was also passed to permit the issue of notes under the value of £5, a right that was extended as well to the country banks, though they were still under the obligation of paying cash for their notes on demand. The Bank now largely extended its issues

of notes, and this gave temporary relief to the financial tension.

The suspension was only supposed to be temporary, but the country now entered upon a period of incontrovertible paper currency that lasted until 1819; during this time it was impossible for the general public to get gold at the Bank in exchange for notes, though an exception was allowed in the case of merchants who wanted gold for transmission abroad, and in a few other instances. For some years after 1797 bank-notes circulated at par, for bankers and merchants were determined to maintain bank credit. The Directors acted with great caution and the Government received bank-notes at par value in payment of the taxes. In a few years, however, they showed a tendency to depreciate, people were unwilling to take them at their nominal value, and the country again suffered from all the evils of a debased currency. Full weight coins were now hoarded or driven out of the country by depreciated paper, and soon there was a scarcity of both gold and silver, the scarcity of silver being increased by the Act of 1798 which prohibited the coinage of silver. As a result of the depreciation the price of all commodities rose and with them the price of bullion; but the price at which gold bullion was to be bought by the Mint had been fixed by law in 1717 at £3 17s. 10½d. per ounce, and consequently there was an increasing discrepancy between the Mint and the market prices of the metals. By 1800 the market price of gold was £4 5s. per ounce, and of silver 5s. 7d. per ounce, and the foreign exchanges were unfavourable.

The Government showed itself incompetent to deal with this difficulty, and failed to grasp the facts that the rise in the market price of gold and the fall of the exchanges were sure signs of depreciation of the paper currency, that it was the excessive issue of notes relatively to the amount of coin in the country that had caused the

depreciation, and that the depreciated bank-notes were driving the metallic currency out of the country. When peace was made in 1802 cash payments ought to have been resumed, but the Government held firmly to the opinion that the difficulty was due to the fact that gold had risen; they refused to believe that paper money had depreciated, and declared that as long as the foreign exchanges were unfavourable it would be impossible to resume cash payments. Addington, in bringing in a Bill to continue the restriction, declared "that while the rate of exchange is disadvantageous to us, an augmentation of the circulating cash would create a trade highly injurious to the commerce of this country. For several months past there has been a trade carried on for the purchase of guineas with a view to exportation. It is on these grounds that I submit to the House the expediency of continuing the restriction with regard to cash payments of the Bank." Fox, who understood the question more clearly, said that restriction was the real cause of difficulty, and advised a return to cash payments; but, though the Bank Directors were quite ready and willing to resume cash payments, the Ministers would not allow it. An Act was passed which not only restrained the Bank from paying in specie, but also allowed country bankers to discharge their own notes in Bank of England paper.

The year 1807 was again a period of speculation and overtrading, for, after the flight of the Portuguese royal family to Brazil, English merchants expected all the South American ports to be opened to their trade. Many joint-stock companies were formed and the number of private banks rapidly increased, flooding the country with their notes, as they had done in 1793. The numbers of these country banks had risen from 270 in 1797 to 600 in 1808 and to 720 in 1810, and notes were put into circulation to the amount of £30,000,000. The Bank of England increased

the difficulty by extending its issue of notes from £2,946,500 in 1795 to £15,475,700 in 1809, and to £20,070,600 in 1810, whilst the market price of standard gold rose to £4 11s. in 1809 and the foreign exchanges continued unfavourable, the exchanges with Hamburg falling 9 per cent. and with Paris 14 per cent. Efforts were made to force the currency of bank-notes for domestic circulation at their nominal value, and they were received at this rate in payment of the taxes, but the power of the Government to force the public to accept them in the same way was called in question by a circular issued by Lord King to his tenants in 1811, in which he refused to receive bank-notes at their nominal value in payment of the rent due to him. He professed himself willing to receive payment in guineas, in Portuguese gold coin, or in bank-notes reckoned at their real value, with the market price of gold at £4 14s. an ounce. As this circular was an attack on the currency of the nation, Stanhope took up the question in Parliament, and a measure was carried declaring it illegal to give more than twenty-one shillings for a guinea or less than twenty shillings in coin for a one-pound note; but bank-notes were not yet legal tender and the Act consequently had little effect. For some time in Ireland there had been two prices for every transaction—a price in paper money and a price in coin; and, though this does not seem to have been the case in England, at any rate openly, yet prices were rising, and the law forbidding the exchange of a guinea for more than its nominal value was often evaded.

In 1810 the Bullion Committee was appointed to inquire into the state of the currency, and Bank Directors, private bankers, merchants and independent witnesses were summoned before it to give evidence. The Bank Directors still clung to the opinion that the fall of the exchanges had nothing to do with the issue of paper

money, and that the unfavourable exchanges and the drain of specie were due to the large demands which had been made on the Bank by the Government and to the unusual continental demand for gold caused by the war. They denied that bank-notes were depreciated or that there had been any over-issue of notes; in fact, they had come to believe that bank paper was a real and fixed measure of commodities and had intrinsic value in itself, and that gold was only an article to be bought and sold like any other article. The Bullion Committee, however, came to a different conclusion, and gave it as their opinion that the rise in the market price of gold and the fall of the exchanges were due to the state of the currency. There was no real scarcity of gold and no appreciable rise in the market price of gold bullion anywhere but in England; hence, if a Bank of England note, which at the rate of £3 17s. 10½d. per ounce of gold professed to be the equivalent of 5 dwts. 3 grs. in gold would only exchange for 4 dwts. 8 grs. in the market, it was clear that the note must have depreciated. Gold, they said, had since the suspension of cash payments ceased to be a measure of value, notes were the only standard of price, and the value of notes varied in proportion to their quantity. Paper money, unlike coin, can only circulate within the country, and so an excess of paper money raises the prices of all things, including bullion, and as the currency no longer bears the same relative value to goods as the currencies of other countries, a fall in the exchanges results. The suspension of cash payments, they continued, had thrown into the hands of the Bank Directors the charge of supplying the country with a circulating medium, and it was impossible for any human agency to judge accurately the quantity required. The precious metals adjusted themselves naturally to the demand for them, but in the case of a paper currency the only test as to the quantity required was the market price of bullion and the condition

of the exchanges. Hence they concluded that it was highly desirable that the value of the circulating medium should be brought into conformity with its real and legal standard in gold bullion, and that the high price of bullion and the condition of the foreign exchanges were sure signs of an excessive issue of paper money; they regretted that the suspension, which was only meant to be temporary, had been continued as a permanent war measure, and recommended that a resumption of cash payments within the year should be compelled by Act of Parliament.

The Ministers and Parliament, notwithstanding the arguments brought forward, refused to adopt the report of the Committee, and a series of resolutions were moved and carried in Parliament to the effect "that there was no legal weight of bullion in the coins beyond what the caprice of each sovereign might dictate; that bank-notes were merely promises to pay in these coins; that they always had been and at that moment were held equivalent in public estimation to the coin of the realm, and generally accepted as such in all pecuniary transactions to which such coin is lawfully applicable, and that the price of bullion and the state of the foreign exchanges were in no way owing to excessive issues of bank paper" (Macleod). Yet the state of things in the country proved them to be in the wrong. The rise of prices kept pace with the depreciation of the currency; the market price of gold, which in 1811 was £4 16s., rose to £4 18s. in 1812, and reached its highest point, £5 10s., in 1813, whilst the real value of the bank-note for 20s. was only 15s. 11d. In spite of the law to the contrary a guinea was often exchanged for 27s. (*i.e.*, for a £1 bank-note and seven shillings), and, when a test case was brought forward, the Court of Common Pleas held that it was not a crime to sell guineas at a premium.

The defeat of the French in 1813 and the consequent

opening of the ports of North Germany and Russia to English trade again, caused a period of speculation and over-trading, when the number of country banks greatly increased. In the reaction that followed a little later the failure of many of these country banks led to the withdrawal of a considerable amount of paper money from circulation, with the result that in 1816 the price of gold fell to £3 18s. 6d., and money began to come into the country again. The fall in the price of gold would have made it quite easy to resume cash payments, more especially as there was at that time plenty of money in the Bank; but, though partial resumption was permitted, the opportunity for total resumption was allowed to slip by, and financial difficulties soon rose again. After peace was finally made the continental States wanted to replenish their currencies, and, as money was now plentiful in England, foreign loans were largely taken up here, and there was a steady demand for gold for exportation. Consequently the market price of gold began again to differ from the Mint price; there was a drain of specie from the country, and it was felt that, unless something was done, the treasure which had recently been accumulating at the Bank would soon be exhausted. In 1819 Committees of both Houses of Parliament were appointed to inquire into the state of the Bank, and resumption of cash payments was finally decided on. After February 1, 1820, the Bank was required to pay in gold bullion at the rate of one ounce of gold in exchange for notes to the nominal value of £4 1s., and this rate was gradually reduced until, by May 1, 1821, it fell to the ordinary Mint price, and one ounce of gold was to be given for notes to the value of £3 17s. 10½d. Payment in bullion was to be continued for not more than three years after 1821, and after that the Bank was required to cash notes in the coin of the realm.

Note on Prices.

During the greater part of the eighteenth century the prices of the necessaries of life were lower than in the seventeenth century, though wages were somewhat higher, but until quite the end of the century prices were very little affected by the currency. The average price of wheat was, between 1704 and 1714, 42s. 9¾d. per quarter: between 1715 and 1724, 35s. 4d. per quarter; between 1730 and 1750, 31s. 3½d., and between 1742 and 1756, 27s. 8d. The comparatively high average of the early years of the century may be accounted for by the famine year of 1708, when wheat rose to 81s. 9d. per quarter, and the low prices in the middle of the century were due to fairly good harvests, together with improvements in agriculture and the introduction of capitalist farming. It is difficult to compare the prices of live stock, because the breeds were being improved so rapidly, but the prices of meat and of dairy produce were very much the same as in the seventeenth century. Up to 1770 beef was 3d. per pound, butter 5·33d. per pound, cheese 3·25d. per pound. And in the next twenty years—from 1770 to 1790 —prices had only risen slightly; beef was now 3·71d. per pound, butter 6·40d. per pound, and cheese 3·80d. per pound; while wool had fallen from 9¾d. to 8½d. per pound.

Towards the end of the century there was a sudden and unprecedented rise of prices, and between the years 1790 and 1820 all the necessaries of life became very much dearer, and again as at the end of the sixteenth century wages did not rise in proportion. Between 1795 and 1820 the average price of wheat was 86s. 10d. per quarter, the average for the year 1812 was 155s. 6d., and the price rose in March, 1801, to 156s. 2d. Prices of other necessaries rose in proportion. In 1800 beef was 6·8d. per pound, butter 11·33d. per pound, and cheese 6·25d. per pound, and the average for the next twenty years, from 1800

to 1820, was, for beef 7·73d per pound, for butter 11·5d. per pound, and for cheese 7·33d per pound. In the next ten years, from 1820 to 1830, there was a very marked fall of prices; for beef fell to 4·6d per pound, butter to 6·5d. per pound, cheese to 4d per pound. Tooke, the chief authority on prices for this period, attributes the great advance of prices at the end of the eighteenth and beginning of the nineteenth centuries to the run of bad harvests and the effect of the war, denying that the condition of the currency was even a contributory cause in most years, though even he allowed that in 1810 the rise took place concurrently with a large issue of bank-notes, which probably heightened the effects of a bad harvest. Sir John Graham, on the other hand, in his tract on "Coin and Currency," considered the depreciated and inconvertible paper money the main cause of the difficulty. "From the comparison of the issues of the Bank with the correspondent average of the price of wheat throughout this long series, it will appear that an increase of issues has, with wonderful precision, created a rise of prices—not always in the same year, but more generally in the one immediately succeeding, and a decrease of the issue has produced, in like manner, a correlative decline. The effect of the increase is illustrated by the years 1803, 1804, and 1805, in which the harvests were good and the produce abundant, and in which the rise of prices cannot therefore be attributed to a deficiency of supply" Undoubtedly the period from 1790 to 1820 would in any case have been a time of scarcity and high prices, as the result of frequent bad harvests and the pressure of war, but these causes in themselves would not account for the uniform range of high prices over so long a period, nor for the decided fall after 1820, without the explanation afforded by the increase in the paper currency, the consequent depreciation, and the concurrence of the fall of prices with the resumption of cash payments.

CHAPTER IX

THE ADOPTION OF THE GOLD STANDARD

BIMETALLISM has been defined as "the theory and attempted practice to make one permanent, scientific, automatic monetary standard by the union of two metals, gold and silver, at a ratio and weight to be fixed by Government authority," and the same writer gives it as his opinion that "no two different substances can be exchanged *for any length of time* upon parallel lines of quantities and values, neither can they be produced for any length of time on parallel lines of cost" (Norman, "Universal Cambist"). The history of nearly five centuries of the metallic currency in England proves the truth of this statement. Notwithstanding the efforts of the Government to fix a Mint ratio between the metals that should correspond as closely as possible with the market ratio, the Mint and the market ratios were constantly at variance, and the relatively cheaper metal always tended to flow out of the country. Moreover, during this period it cannot be said that the two metals were held to be strictly on an equality; payments could be made equally in either, but silver was always held to be the standard. Silver was the metal in which debts were estimated and in which most of the internal trade of the country was carried on; but on the other hand, during the last part of this period at any rate, gold had been increasing in importance, and silver, though nominally the standard, was falling back into the position of a subsidiary

currency. Economists are not agreed as to the time when this change took place. Some supporters of the gold standard say that the displacement of silver began to take place in reality as far back as the reign of Edward III, when the gold coinage first became an integral part of the currency, and that ever since that time its predominance over silver as the metal for international transactions, for hoarding, and for measuring values has been increasing. In support of this view they point out, (1) that the great debasements of the coinage after that time affected silver rather than gold, that even the most reckless rulers hesitated to tamper with the gold coinage, and that all their efforts were directed to keeping the gold coinage in the country; (2) that gold was the metal that legally passed by weight since the law of Elizabeth in 1587, and that the currency that passes by weight is the true standard currency of the country; (3) that gold was the money most usually hoarded and that "that money would always tend to become the standard money which is felt to form the most reliable medium for the storing of purchasing power" (Carlile).

From its greater value and smaller bulk, gold was more suitable than silver for use in large transactions and for hoarding, but its predominance over silver was certainly increased by the policy of the Government in the seventeenth century in persistently overrating gold relatively to silver, which, by causing a constant influx of gold and outflow of silver, forced the use of gold on the country for all important transactions. For many years the silver coinage was so debased that it could only be used for retail trade at home and was useless for purposes of foreign trade.

Yet the economists of the seventeenth century held that though only one metal must be the standard and the coins of other metals must be rated in reference to the standard, in England that standard was silver. Locke

accepts as an established fact that "silver is that which mankind have agreed on, to take and to give in exchange for all other commodities, as an equivalent." "Silver," he says, "makes the money of account and measure of trade all through the world. For all accounts are, I think, everywhere made, and accounts kept in silver coin. . . . Silver therefore, and silver alone, is the measure of commerce. Two metals, gold and silver, cannot be the measure of commerce both together in any country; because the measure of commerce must be perpetually the same and invariable, and keeping to the same proportion of value in all its parts. . . . One metal, therefore, alone can be the money of account and contract and the measure of commerce in any country. The fittest for this use, of all other, is silver, for many reasons, which need not here be mentioned. It is enough that the world is agreed on it, and have made it their common money, and, as the Indians rightly call it, measure. All other metals, gold as well as lead, are commodities. . . ." Yet he considers that "gold is treasure as well as silver, because it decays not in keeping and never sinks much in its value"; and that "gold is fit to be coined as well as silver, to ascertain its quantity to those who have a mind to traffick in it; but not fit to be joined with silver as measure for commerce." The same views are expressed by the Council of Trade and Plantations, who held that since it was "impossible that more than one metal should be the true standard of commerce, and the world by common consent and convenience having fixed silver, gold, as well as other metals, is to be looked upon as a commodity, which, varying in its price as other commodities do, its value will always be changeable, and the fixing of its value in any country so that it cannot be readily accommodated to the course it has in neighbouring countries will always be prejudicial to the country that does it." Sir William Petty, too, held that the coins which

were to be the principal measure of property could be made of one metal only, and "as matters now stand silver is the matter of money."

In the eighteenth century the tendency to the predominance of gold was steadily increasing. As a result of the continued overrating of gold, that metal was the cheapest medium in which to pay debts, and when it became customary to make payments of any importance in gold, debts began to be estimated in that metal as well, and it became in practice, though not in theory, the standard of value. All the chief legislative measures concerning the currency in the eighteenth century tended in the same direction. The Act of 1717 fixing the guinea at 21s., whilst its real value was about 20s. 8d., practically stopped the free coinage of silver, as it was not worth while bringing silver to the Mint, and by 1720 silver had become in practice a subsidiary coinage held up in value by gold; the public used gold for most of their transactions and measured values in it. The Act of 1774, ordering the return of light-weight gold coins to the Mint and thus providing against depreciation in the future, and the Act of 1798 prohibiting the free coinage of silver, were both passed with the object of protecting the gold currency, and comparatively little attention was paid by the Government to the condition of the silver coins. Yet the change had taken place so imperceptibly that even in the latter part of the eighteenth century economists did not realize what had happened, and still considered that silver was the standard metal. Adam Smith, in tracing the history of the currency, said that silver was the sole standard of most European countries after the fall of the Roman Empire; but when gold became generally used as well and people began to understand better the proportion between the respective values of the two metals, it was found convenient to regulate the rate at which they should be exchanged and to make them both legal tender at that

rate. "In this state of things and during the continuance of any one regulated proportion of this kind the distinction between the metal which is the standard and the metal which is not the standard becomes little more than a nominal distinction." He considered that that metal in which wages were paid, accounts kept, and obligations for debts expressed, would be the standard; hence he held that silver was still the standard metal in England. Certainly in his day wages were paid mainly in silver, and a great deal of the internal trade was carried on in silver, because no coins of sufficiently small value were struck in gold; but when he speaks of debts and large sums being expressed in sums of silver, he meant that they were expressed in pounds sterling instead of in guineas, and a pound sterling at this time meant in practice a certain weight of gold rather than a certain weight in silver. He seems to realize this partially at any rate, for he said that if the custom of keeping accounts and of expressing promissory notes and other obligations for money in this manner (*i.e.*, in terms of gold) should ever become general, gold and not silver would be considered as the metal which was peculiarly the standard or metal of value. "When," he said, "two metals are circulating together at a fixed ratio, the value of the most precious of the two will regulate the value of the whole coin." Thus, though he did not believe gold to be the standard, he allowed that it was the regulating element in the coinage, and after this admission only one step was required to acknowledge it as the standard as well.

The Act of 1816, introducing the single gold standard and putting an end to the bimetallic currency, did little more than legalize a state of things already in existence; yet even the writings of Lord Liverpool, whose policy was mainly responsible for the change, show signs of the persistence of the old ideas about the currency. Judging from its preamble, the main object of the Act was to protect

the silver currency.—"Whereas the silver coins of the realm have by long use and other circumstances been greatly diminished in number and deteriorated in value so as not to be sufficient for the payments required in dealings under the value of the current gold coins, by reason whereof a great quantity of light and counterfeit silver coin and foreign coin has been introduced into circulation within this realm, and the evils resulting therefrom can only be remedied by a new coinage of silver money," etc. Lord Liverpool speaks of the preference of the people for gold, but does not assign any reason for this preference. "After the recoinage, gold coins passed in payment at a higher value than that at which they were still rated in the Mint indenture, or than the relative value of gold to silver at that time would justify; not, however, by the authority of Government, but by the general consent of the people." He does not seem to realize (1) that this general consent was a question mainly of cheapness and a direct result of Government policy, even though at the time the Government did not see the goal towards which its efforts were tending; (2) that gold was brought to the Mint instead of silver because it was the cheaper metal, and (3) that the use of silver declined because it was impossible to keep good silver coins in circulation. He recognized, however, that the pound sterling of his time meant a certain quantity of gold instead of a certain quantity of silver, and gold was now made legally as well as practically the sole standard of value.—"And whereas at various times heretofore the coins of this realm of gold and silver have been usually a legal tender for payments to any amount, and great inconvenience has arisen from both these precious metals being concurrently the standard measure of value and equivalent of property, it is expedient that the gold coin made according to the indentures of the Mint should henceforth be the sole standard measure of value and legal tender for payment without any limitation of amount,

and the silver coin shall be legal tender to a limited amount only for the facility of exchange and commerce."

By this Act silver was legal tender only for sums of 40s. and under, and thus for the first time a distinction was made between legal tender and subsidiary coins—a distinction that had been unknown in mediæval times. It is only necessary for coins which are legal tender for an unlimited amount to be current at what is approximately their bullion value, and it is only these coins that can be used for foreign trade; the bullion value of subsidiary coins, which are rated in terms of legal tender money, is generally considerably less than their nominal value. No difficulty is caused by this because they are only used for small payments, and as their low intrinsic value makes it impossible to use them for foreign trade they are kept at home. Thus for the first time in its history the country was provided permanently with an adequate supply of small change.

Free coinage of silver was provided for, and a proclamation was to be issued declaring that all persons might bring silver to the Mint to be coined, though with a reservation that Parliament might withdraw this right if silver became too plentiful. This promise was not fulfilled, for the proclamation which would have enabled people to bring silver to the Mint was never issued, and consequently only that silver that the Crown sends to the Mint for the purpose is converted into coin. In order to defray the expenses of the new Mint and the new coinage, and to prevent any temptation to melt down the coins for export, a seignorage charge was again imposed. According to the scheme suggested by Lord Liverpool, only brassage, or the cost of workmanship, was to be taken from the coin; but by the Act seignorage was imposed as well, the total amount taken being $6\frac{13}{31}$ per cent., or 4s. in the pound troy of standard silver. Silver shillings were still coined at the rate of 66 to the pound troy, but they

were to be issued to the public only at the rate of 62 to the pound troy. The ratio adopted between gold and silver, viz., 1 : 15·21—a ratio by which silver was considerably overvalued—enabled the Government to buy silver bullion at a profit of 8 per cent Under a bimetallic system this would have had the result of driving gold coins out of the country, but the 40s limit for the legal tender of silver prevented any fear that this would take place. The Government gained by the new coinage in two ways, first, by the seignorage charge and by the advantage of buying silver at a rate much lower than the Mint rate, and secondly, by the profits gained after the expenses of coinage had been defrayed, which were to form part of the Consolidated Fund.

A new gold coin—the sovereign—was struck, of the value of $\frac{20}{21}$ of a guinea and weighing 113 grains, which was to represent the value of the pound sterling in gold. This was the last meaning given to the term "pound sterling" in the English monetary system. In early times it had meant a pound weight of silver Gradually this weight was reduced, and the coins became lighter in the latter part of the Middle Ages, until by the reign of Elizabeth, when 66 shillings were coined from the pound troy of silver, the pound sterling of money was only about a third of its former weight. In the silver coinage the pound sterling had never been anything but money of account, but as early as the reign of Henry VII its value was represented by a gold coin. From the time of Charles II down to 1816, however, it was again only money of account, for the guinea that was supposed to represent it was not correctly adjusted by Government rating and was really worth more than the pound, sometimes to the extent of several shillings. In 1816 "the full value money of account created the full weight coin," and the sovereign was again the pound sterling valued in gold, but henceforth it meant simply 113 grains of fine gold, and did not

correspond with any particular weight in silver. No seignorage is imposed on gold; the coinage is free, and any one can bring gold to the Mint and have the value returned to him in full-weight sovereigns, the Government bearing all the cost of wear and tear.

Since 1816 there has been no change of any importance in the metallic currency; gold money is now legal tender to any amount, silver to the extent of 40s., and bronze to the extent of 1s. Gold is the sole standard of value, and both silver and bronze money are subsidiary to it and are in reality token coins, to which the Government stamp gives for the purpose of circulation within the country a nominal value considerably above their real value. The gold coinage has remained practically unaltered. Of recent years gold coins of the value of £5 and £2 have occasionally been struck, but have not passed into general circulation. Some slight changes have been made in the silver coinage. In 1831 the groat (4d.) was revived and continued to be struck until 1856, when it ceased to be issued because of its close resemblance to the threepenny-piece, which had reappeared in 1845. In 1848 the florin was issued. Since 1887 a few 5s. and 4s. pieces have been in circulation, but they are too heavy for convenience and are not popular. The denominations of the copper coinage have been unaltered, but in 1860 bronze was substituted for copper; this brought about a considerable reduction in weight, for the pound avoirdupois of bronze was cut into 48 pence—about double the number that had been struck from the pound of copper.

A comprehensive Act was passed in 1870 "to consolidate and amend the law relating to the coinage and to Her Majesty's Mint." The clauses concerning the standard of fineness of the metal, legal tender money, the free coinage of gold, the prohibition of tokens and of coins other than those mentioned in the Act, merely

continued in all essential points the existing state of things The regulations about light gold coin state that "every person shall by himself or others cut, break, or deface any such coin tendered to him in payment and the person tendering the same shall bear the loss" As this proved ineffective it was altered in 1889, and by an Act passed in that year light gold coin issued before 1837 could be exchanged at the Mint for good weight coin, if it was only light through fair wear and tear and had not been illegally dealt with

The Act of 1870 also defined the powers of the sovereign to deal with the coinage by proclamation The sovereign is authorized to determine the dimension of and size of any coin, and the denominations of the coins to be coined at the Mint, to determine the weight below which a coin shall not be legal tender, to call in any coins and to declare any other coins to be legal tender, for any amount not exceeding five shillings, to allow any foreign coins to be current and legal tender after taking into consideration the relative weight and fineness of such coins as compared with English coins, to establish a branch of the Mint in any English possession and to impose a charge for coinage thereat, to direct the whole or any part of this Act to apply to any British possession, to regulate any matters relating to the coinage and the Mint within the present prerogative of the Crown but not provided for in this Act, and to revoke or alter any proclamation previously made It was also enacted that the trial of the pyx was to be held at least once every year in which coins have been issued, and regulations about the trial of the pyx were to be settled by the sovereign with the advice of the Privy Council by Order The Treasury was authorized to fix the number and duties of the persons and officers employed at the Mint and to make regulations concerning the general management of the Mint The office of Master of

the Mint, which had been in existence since the reign of Henry I, was now combined with that of Chancellor of the Exchequer, who is Master, Worker and Warden of the Mint in England and Governor of the Mint in Scotland. The Treasury may appoint deputy masters and officers, and the Master of the Mint has power to promote, suspend, and remove officers. The custody of the standard trial plates of gold and silver and the right to determine the justness of the gold and silver coin issued, as well as of the standard weights, was given to the Board of Trade.

CHAPTER X

HISTORY OF BANKING AFTER 1819

THE Act of 1819 authorizing the resumption of cash payments after a certain date had given general satisfaction both to the public and to the Bank Some distress had been caused by trade disturbances and by fluctuations of prices, which, as a result of bad seasons, had been very high in 1817 and 1818 and had begun to fall in 1819; but by 1820, when the Government had already repaid £10,000,000 of the amount it had borrowed, money was rapidly pouring into the Bank. The market price of gold had fallen in 1819 to £3 17s. 10½d., when bank-notes were at par, and by the beginning of 1822 to £3 17s. 6d., when the Mint price of gold was higher than the market price. As a result, the accumulation of treasure in the Bank was soon so great that the Directors felt themselves able to resume cash payments at once, and an Act was passed allowing them to cash notes in coin in 1821 instead of postponing the change until 1823, as had been originally intended.

It seemed at first as if the financial difficulties which had disturbed the last quarter of a century were now at an end, but the Bank had not yet realized the necessity for a sufficient reserve of gold as a basis for its notes, and the result was that periods of pressure on the money market were constantly recurring. The term "a pressure on the money market" has been defined by Gilbart as "a difficulty of getting money in the London

market either by way of discounting bills, by loans, or on Government securities"—a difficulty which was usually accompanied by "an unfavourable course of the foreign exchanges, a contraction of the circulation of the Bank of England, and a high rate of interest." Such a period was always preceded by a time of high prices and active trade—a time when there was every appearance of unusual prosperity. Men borrowed freely for commercial enterprises and speculation, and this gave rise to excessive gambling in stocks or commodities and overtrading, which inevitably led to a reaction. Money under such conditions became very dear, and at the same time some of the commercial enterprises for which it had been too freely used probably proved failures, whilst others were not immediately remunerative. The scarcity of money caused the rate of interest to rise, and, as the foreign exchanges were unfavourable, the Bank contracted its circulation of notes, in accordance with the theory then growing up that the circulation of bank-notes should vary with the condition of the foreign exchanges, and thus the difficulties caused by the scarcity of money were directly aggravated by the policy of the Bank.

The financial crisis of 1825—the first serious disturbance since the resumption of cash payments—came upon the nation with the shock of a surprise, for there was a large supply of bullion in the Bank, the preceding years had been years of prosperity, and apparently there was no cause for alarm. There had been some distress among the agricultural community, but the trading and manufacturing interests were flourishing, and the King in his speech from the throne felt justified in saying that "there never was a period in the history of this country when all the great interests of the nation were at the same time in so thriving a condition, and when a feeling of content and satisfaction was more widely diffused through all classes of the British people." Yet it was just at this moment

that the financial position was becoming critical. Towards the end of the year 1825 a spirit of speculation was rising, caused mainly by the extravagant expectations roused by the independence of the Spanish colonies in South and Central America, for it was thought that enormous wealth could be gained now that this trade, which the Spanish had hitherto tried to keep as a rigid monopoly of the mother country, was to be thrown open to the world. It was alleged shortly that British capital to the amount of £150,000,000 was sunk in various enterprises in South and Central America, and the rage for speculation once started very rapidly spread. In the desire to get wealth rapidly people lost all judgment and sense of proportion, and invested in all sorts of schemes of which nothing was known but the name. Anglo-Mexican mining shares, for which £10 had been paid in the first instance, could be sold for £43 at the end of 1824 and for £150 in the middle of January, 1825; Real del Monte shares rose from £70 to £550 in December, 1824, and to £1,350 in January, 1825. This speculative mania was accompanied by a sudden and general rise of prices.

Every one wanted money for trading purposes, with the result that the stock of bullion in the Bank of England fell from £14,000,000 in January, 1824, to £11,600,000 in October, and the exchanges with Paris were becoming unfavourable. In these circumstances, as the great drain on its resources was caused by excessive speculation, and as the money drawn from the Bank was being used for purposes of exportation, the Bank ought to have made money more difficult to obtain by contracting its issues and raising the rate of discount; but it had not yet learnt the lessons of the eighteenth century, and, in defiance of the principles of the bullion report, increased its issues instead, with the result that by April, 1825, its reserve of bullion had been reduced to £6,650,000, while its issues of notes had been increased by £3,600,000.

In May and June the reaction began, and the period of speculation and inflated prices was followed by a general failure of credit and fall of prices. The absorption of such an enormous amount of capital in enterprises, many of which were quite unremunerative, made money scarce and caused the rate of interest to rise ; soon it was almost impossible to get money even for ordinary business purposes, for no one would lend, and the legal limitation of the rate of interest to 5 per cent. aggravated the difficulty. The country banks felt the pressure most severely and sixty-three stopped payment, though many of these were really solvent and several eventually resumed business. As the panic increased it was feared that the Bank of England itself would be unable to maintain its position, for its reserve of bullion had sunk to £1,260,890, no money was coming in, and, though it had contracted its issues when the reaction began, the outflow still continued, and the Government refused to revert to the expedient of 1797 and authorize the suspension of cash payments. The country, according to Huskisson, was within twenty-four hours of a state of barter, and a catastrophe seemed imminent, when the Bank at length changed its policy again, and by discounting bills freely and increasing its issues stopped the panic and averted the danger. This course of action was justifiable because the money issued was not used for exportation or for speculative trading, but was employed to support the credit of the country circulation ; exchanges had tended to become favourable again as soon as the rate of discount had risen, there was no fear of an excess of paper money, and a large proportion of the bank-notes issued were merely substituted for the discredited notes of the country banks, which were now withdrawn from circulation.

When the panic had subsided an inquiry was made into the cause of the disturbance, and the opinion generally

expressed was that it was due to the character of the country banks and to their excessive issues of notes. The Bank of England was not allowed to issue notes under the value of £5, but the country banks had been given permission to continue the issue of £1 and £2 notes until 1832, when the Bank charter expired. The amount of these notes in circulation at the time is not known, but it was thought to be dangerously large. It was now decided that all notes under the value of £5 should be suppressed at once, and, as has already been stated, Bank of England notes were now used to a much greater extent by the country banks.

The character of the country banks themselves was a more serious difficulty and was a direct result of the monopoly of the Bank of England, which had prevented the establishment of joint-stock banks, and had left the work of supplying the country with a paper currency to private bankers, who had often very little capital or credit to support them in times of crisis. "The present system," wrote Lord Liverpool, "is one of the fullest liberty as to what is rotten and bad, but one of the most complete restriction as to all that is good. By it a cobbler or a cheesemonger, without any proof of his ability to meet them, may issue his notes, unrestricted by any check whatsoever; while on the other hand, more than six persons, however respectable, are not permitted to become partners in a bank, with whose notes the whole business of the country might be transacted. Altogether the system is so absurd, both in theory and in practice, that it would not appear to deserve the slightest support, if it was attentively considered even for a single moment." The result of the inquiry was that the monopoly of the Bank was modified, and henceforth joint-stock banks, and private banks with more than six partners, might be established in the country, though not in London or within a radius of 65 miles of London, provided that

they had no establishment as bankers in London, that all the partners were liable for the whole debts of the bank, and that no bills were to be drawn on London for a smaller sum than £50.

Another important development was the establishment of country branches by the Bank of England, the first branches opened being at Gloucester, Manchester, and Swansea. The step was undoubtedly an advantage for the general public, and the confidence inspired by these branch establishments ensured their success. They acted only to a small extent as banks of deposit, for they did not allow interest on deposits, as was the custom with the country banks, but on the other hand they discounted bills more cheaply, charging as a rule only 4 per cent., whilst the country banks not only charged 5 per cent., but often took a commission in addition. The country bankers looked very unfavourably on this new development, fearing that they would not be able to maintain their position at all if they were forced into competition with a great corporation with exclusive privileges, and they urged that the tendency to concentrate the work of banking in the hands of one institution would become a great national danger: "Should this great corporation conducted by directors who are not personally responsible succeed, by means of these exclusive advantages, in their apparent object of supplanting the existing banking establishments, they will thereby be rendered masters of the circulation of the country, which they will be enabled to contract or expand according to their own will, and thus be armed with tremendous power and influence, dangerous to the stability of property and the independence of the country."

Thus important changes in country banking took place in consequence of the crisis of 1825, but, though the worthless character of a great deal of the paper money undoubtedly aggravated the difficulty, the country banks cannot be considered to be solely responsible for the

disaster. The great commercial failures which followed did not take place until after the bank panic had subsided, and the banks could not be held responsible for the mania for speculation that would have made a catastrophe inevitable even had there been no notes in circulation at all. "The errors of all the banks put together were trivial compared to the outbreaks of speculative insanity which seized upon all classes. It was not the issue of some bank-notes that led a respectable book-keeping firm to risk £100,000 on a speculation in hops" (Macleod).

The whole question of the position of the Bank was reopened again in 1833, when its charter expired, and it is clear from the demands made for the establishment of a national bank and for "free trade in banking," that there was considerable opposition to the renewal of the Bank privileges. A remonstrance against it was presented by the merchants of London. "That the Bank has made great profits no one can deny, any more than that its gains have been made at the expense of the nation. That it has been well and judiciously managed for its *own* interests may be safely inferred from the fact of its great profits; but that it has been successfully managed for the public weal remains yet to be seen. . . . The question is . . . how far the Bank is susceptible of being steadily managed towards promoting the general welfare of the community. . . . We are not disposed to counsel violent measures, but this we will say, that if Government do not interfere to protect the community from the consequences of bad legislation, the community ought to try to protect itself, and that, in the present instance, can be easily done by uniting to stop the Bank; for it is as clear to us as the sun at noonday that if this community do not stop the Bank, the Bank will stop the community; and we all know which would be the greater evil." The idea of abolishing the Bank privileges was not, however, seriously considered by the Government, and the Bank charter was again

renewed for a term of years, though with some important alterations.

The principle was now clearly expressed that the currency ought to be regulated by the fluctuations of the foreign exchanges; *i.e.*, that the circulation should be increased when the exchanges were favourable and restricted as soon as the exchanges began to turn against England, regardless of the fact that such an increase in the note circulation, occurring solely for this reason, may have the effect of raising the price of commodities, lowering the rate of interest, stimulating speculation, and causing the capital of the country to be invested in foreign securities. It was also suggested for the first time that one third of the reserve of the Bank ought to be kept in the form of coin or bullion. For the first time, too, Bank of England notes were made legal tender. Peel's policy of concentrating the work of banking as far as possible in the hands of the Bank of England led him to think it desirable that there should be only one bank of issue in the metropolis, in order that due control should be exercised over the issue of paper money and facilities given to commerce in time of difficulty. As a step in this direction bank-notes were made legal tender equally with sovereigns except at the Bank of England itself and at its branches, where gold could always then, as ever since, be obtained in exchange for notes.

A modification of the usury laws was effected about the same time. As early as 1818 a Select Committee of the Commons had been appointed to consider the question, and gave it as their opinion "that the laws regulating or restraining the rates of interest have been extensively evaded and have failed of the effect of imposing a maximum on such rates; and that, of late years, from the constant excess of the market rate of interest above the rate limited by law, they have added to the expense of borrowers upon real security. . . . That it is the opinion of this committee

that the present period, when the market rate of interest is below the legal rate, affords an opportunity peculiarly proper for the repeal of the said laws." It was not, however, until 1832 that bills, not having more than three months to run, were exempted from the operations of the laws against usury.

Shortly before this time it had been discovered that it was quite possible to establish a joint-stock bank in London within the 65-mile radius without infringing the Bank monopoly, provided only that it did not issue its own notes. In the early days of banking the issue of notes had been regarded as the most important and almost the only work of a bank, but, since that time, the work of receiving deposits and of discounting bills had much increased, and it was quite possible for a bank to carry on a flourishing business without issuing any notes at all. When, relying on making its profits in this way, the London and Westminster Bank was opened, the Bank of England protested, and appealed to the Government to alter the terms of their charter in such a way as to extend their monopoly to cover all forms of banking work within the 65-mile radius. This demand the Government refused, and it was expressly stated in the new charter that any company or partnership might carry on the business of banking in London and its neighbourhood provided that "they do not borrow, owe, or take up in England any sum or sums of money on their bills or notes payable on demand, or at a less time than six months from the borrowing thereof, during the continuance of the privileges granted by this Act to the said Governor and Company of the Bank of England." In order that some check might be kept on the Bank it was ordered that accounts of the amount of bullion in the Bank and of the notes in circulation were to be sent weekly to the Chancellor of the Exchequer. On these conditions the exclusive privileges of the Bank were continued until 1845.

The next period of financial disturbance was in the years 1836 and 1839, and, though it was not so serious as the crisis of 1825, it presented much the same features—abundance of money, inflation of credit and prices, speculation, followed by a drain of the Bank reserves This time it was the joint stock banks which were thought to be mainly responsible for the difficulty Their numbers had increased rapidly since 1833 and there were now seventy-two established in the country, they were employed a great deal in the work of rediscounting bills and had certainly done a good deal to inflate credit At the same time there was a foreign drain which seriously lowered the Bank reserves The abundance of money that preceded the crisis of 1839 had been caused by a great extension of credit and paper money in France, Belgium, and the United States, which had had the effect of driving bullion out of these countries and causing an influx of gold into England The failure of credit in France and Belgium a few months later and the consequent extinction of a great deal of worthless paper money caused a flow of bullion back to these countries A great deal of this bullion come from the Bank of England, and as at the same time the failure of the Agricultural and Commercial Bank of Ireland had made it necessary to send a good deal of money there as well, the Bank reserve was rapidly reduced, falling from £9,794,000 in January, 1839, to £4,117,000 in May and to £2,406,000 in September. The Directors became alarmed for the safety of the Bank, for foreign bankers were hastening to realize their securities in London, and bankruptcy seemed to be impending To avoid a disaster, arrangements were made for borrowing £2,500,000 from the Bank of France, this enabled the Bank to pay out money and discount bills freely, and, as usual, confidence was soon restored.

In the discussions on the existing financial system that

followed the disturbances of these years, it was realized that the principle of regulating, or attempting to regulate, the currency by the foreign exchanges was unsound, for the result had been that just when money was abundant and cheap, and when consequently there was a tendency to overtrading and speculation, the Bank aggravated the danger by increasing its note circulation, thus making money more abundant still. As a result of the low rate of interest the investment of English money abroad and a drain of specie invariably followed. The doctrine now put forward was known as the "Currency Principle," and it was a little later adopted by Peel in the Act of 1844. The main idea was that the circulation, instead of being regulated by the foreign exchanges, should be regulated by the amount of bullion in the Bank, and that a strict proportion should always be kept between the amount of bullion and the amount of notes in circulation:—"The rule ought to be that variations in the amount of the circulation shall correspond to the variations in the amount of bullion, and the adherence of the Bank to this rule ought to be obvious upon the face of the published accounts." The idea of Loyd, the chief exponent of this doctrine, was that the primary function of the Bank was not the transaction of business but the maintenance of a sufficient reserve on behalf of the nation to enable it to meet its liabilities to other countries, and he thought that a drain of any sort ought always to be met by contracting the currency. He sums up his objections to the existing system in the following passage:—"First, for the simple, exclusive purpose of regulating the circulation of the country it leaves us without any rule whatever, and accordingly we find by the public returns that no fixed relation exists between the amount of bullion and the amount of circulation. Second, the circulation may decrease while the bullion is increasing, or it may increase while the bullion is

decreasing—we have had practical examples of each kind within the last few years. Third, the bullion, through the demands of the depositors, may leave the Bank coffers in large amounts; in fact, it may be wholly drained out without any contraction of the circulation, and, therefore, without any effect being produced on prices or the foreign exchanges by means of which the drain may be checked."

The main object of Peel's Bank Charter Act of 1844 was by the adoption of the Currency Principle to get a sufficient cash basis for the amount of notes in circulation, to force the amount of notes to correspond strictly with the amount of bullion, and by this means to prevent the constantly recurring periods of crisis of previous years. The steps taken to effect this were (1) to separate the issue from the banking department of the Bank of England; (2) to restrict rigidly the amount of notes that the Bank should be allowed to issue; and (3) to make the Bank of England practically the sole bank of issue in the country—*i.e.*, to give it the sole right of issuing bank-notes.

Loyd had recognized that the Bank was really acting in two capacities—as a national institution it had the responsibility of managing the circulation of the country, and as a private company it carried on an ordinary banking business. If, he thought, these two branches of its work were kept quite distinct, both could be carried on to greater advantage; the national work—the regulation of the currency—could then be placed under strict legislative control, and the work of banking could be carried on on ordinary business lines and the methods assimilated as far as possible to those of the private and joint-stock banks. The separation of the two departments being effected, the next step taken was to place legislative restrictions on the issue department. "We do not want," said Peel, "an abundant supply of cheap promissory

paper. We want only . . . just such an amount of paper . . . as shall be equivalent in point of value to the coin which it represents. That system, therefore, which provides a constant supply of paper equal in value to coin, and so varying in amount as to ensure at all times immediate convertibility into coin, together with perfect confidence in the solvency of the issues of paper, is the system which ought to be preferred." By the Act the issue department of the Bank was allowed to put into circulation notes to the extent of £14,000,000 issued upon securities set apart for that purpose, of which the debt of £11,015,100 due from the Government to the Bank might form a part; no notes beyond this amount might be issued unless there was in the Bank vaults a corresponding amount of gold coin or of gold and silver bullion, but the quantity of silver was not to be more than a fourth of the total amount of gold coin and bullion. Any person was to be entitled to demand notes from the issue department in exchange for gold bullion at the rate of £3 17s. 9d. per ounce. To safeguard the country more effectually against unsound and excessive issues of paper money, the right of issuing notes was gradually to be restricted to the Bank of England. No new bank of issue was to be established in the United Kingdom, though the banks that already issued notes were allowed still to exercise that right, provided that their issues were not increased beyond their present amount and that weekly accounts of the amount of notes in circulation were submitted to the Government and published in the *London Gazette.* If any of these bankers discontinued their issues of notes, the Bank of England might, upon application, be authorized by an Order in Council to increase its issues upon securities to the extent of two-thirds of the notes thus withdrawn. All the profits of this increased issue were to go to the Government.

The Act of Peel and the principles on which it was based have been severely criticized. In the first place it has been questioned whether the separation of the Bank into two departments is either necessary or advisable. Even Wolowski, an advocate of the Act, thought it would be quite possible to impose a definite limit on note issues by other means, and according to Palgrave the division is actually harmful, for, in the first place, it separates the resources of the Bank into two unequal parts, all demands falling in the first instance on the smaller of the two—the banking department—and in the second place he considers it partly responsible for the frequent variations in the rate of discount. By the strict limitation of note issues "the Act of 1844 proposed substantially to destroy the bank-note as an instrument of credit and to make it a mere certificate of coin, leaving to other forms of commercial paper the functions which the bank-note had in part performed" (Conant). The difficulty that resulted from this limitation was that in future it would be impossible for the Bank in times of crisis to come to the aid of the commercial world and to restore confidence by a free issue of notes as it had always hitherto been able to do. Peel recognized this, but thought that it was of little consequence, as he expected the Act to operate in such a way as to prevent these periods of crisis from arising. "It is better," he said, "to prevent the paroxysm than to excite it and trust to desperate remedies for the means of recovery." Moreover, this system of keeping gold in stock equal in value to any issues of notes above the existing amount would have seriously hampered, if it did not entirely prevent, any great expansion of the currency. Peel did not foresee the enormous development of trade and industry in the latter half of the nineteenth century—a development which could not possibly have taken place without a correspondingly great increase of the currency, and to have attempted to expand the currency on the principles

laid down in the Act would have necessitated the accumulation of unwieldy and unremunerative masses of gold in the Bank vaults. This difficulty, however, has been evaded in practice by the widespread substitution of other forms of credit for bank-notes—mainly by the employment of cheques.

It must be remembered that Peel was legislating for his own time, and fixed the amount of the uncovered note issues at £14,000,000 because he was estimating the requirements of the public of that day; no provision was made in the Act to meet any change in the financial needs of the community, and the want of elasticity would have been a serious difficulty had it not been for the development of other forms of credit.

With regard to the restriction and eventual extinction of the note issues of the country banks, Peel's Act was in all probability only hastening on a change that was already taking place, for already some of the country banks had substituted notes of the Bank of England for those issued by themselves, and between the years 1839 and 1843 the country issues had decreased from £11,715,527 to £7,667,916, though bad trade, together with increased postal facilities, may have been partly responsible for this. The country bankers were, nevertheless, much opposed to the Act, and complained bitterly of this attempt to establish one bank of issue for the whole country. It would, they said, "tend to destroy that beautiful system of country banking which now exists in this country—a system which has tended very much to the prosperity of the country, which, by receiving the surplus capital of different districts and giving out the capital for the encouragement of trade, calls forth all the natural resources of the country and puts into motion the industry of the nation, and at the same time supplies a circulation which expands or contracts in each district according as it is required by the trade or agriculture

of the district." The process of extinction, however, steadily continued. Between the years 1844 and 1854 thirty-seven country banks of issue ceased to exist, and the number of the remainder has since then been steadily reduced ; but it must be remembered that it was only the right of issuing notes that was taken away, and banks still continued to be formed to carry on the actual business of banking.

The danger of taking away from the Bank its power of energetic action in times of crisis was proved several times in the next quarter of a century, and on three occasions it was found that a suspension of the Act was the only way to save the country from financial disaster. As early as April, 1847, there was a serious drain of gold from the Bank, which the late Bank Act had apparently done nothing to prevent. This was due partly to the potato famine in Ireland, which necessitated the importation of foreign corn and the exportation of money to pay for it, partly to the absorption of an enormous amount of capital in railway speculation, which resulted in the purchase from abroad of much timber and other railway material. Though a steady drain of bullion had set in at the end of 1846, the Bank made no alteration in the rate of discount until January, 1847, by which time its reserve of bullion had much diminished. As it continued to decrease, both the public and the Directors became alarmed, the rate of discount was raised still further, and for some days it was almost impossible to get bills discounted at all, though the rise of the rate of discount to 10 per cent. and 12 per cent. stopped the outflow of bullion. In the month of August many commercial houses and banks failed, mainly in consequence of a sudden and violent fall of 50 per cent. in the price of grain, and as all the commercial world knew that the resources of the Bank were being rapidly exhausted a panic ensued ; for a time no one would part with either notes or money and private discounts almost

ceased. As a last resource deputations were sent to the Government to ask for a relaxation of the Act, and in October a suspension of the restriction was authorized, and the Bank was allowed to issue notes beyond its legal limit. Taking advantage of this permission, the Bank discounted freely at an average rate of 9 per cent. and the panic subsided, the rush for notes ceasing at once as soon as it was certain that there would be no difficulty in obtaining them. The total value of the notes issued as a result of the relaxation did not exceed £400,000.

The failure of the Act of 1844 to prevent commercial and financial crises called the whole principle of the Act itself into question, and committees were appointed by both Houses of Parliament to make an inquiry and to try and determine whether the Act was in any way responsible for the prevailing distress. The Committee of the House of Lords decided finally against the Act. The report of the Committee of the Commons was in favour of maintaining it unaltered, on the ground that the panic would have taken place in any case, and that though the effect of the Act had been to hasten the crisis, it had probably modified its severity. Peel, who spoke in defence of the Act, had to allow that the possibility of a reduction of the deposits and the question of the reserve of notes had not been sufficiently considered, for whilst the Bank had been trying to restrict the circulation by raising the rate of discount, the withdrawal of deposits, over which it had no control, had thrown on the country large quantities of the notes in the reserve, and thus, though the gold was rapidly running out, the circulation had not been reduced at all. On the other hand, he held that the Bank had been at fault in not raising the rate of discount earlier—as soon, in fact, as the drain of gold had begun. "If the Bank had possessed the resolution to meet the coming danger by a contraction of its issues, by raising the rate of discount, by refusing much of the accommodation they

granted between the years 1844 and 1846—if they had been firm and determined in the adoption of these precautions, the necessity for extrinsic interference might have been prevented; it might not then have been necessary for the Government to authorize a violation of the Act of 1844." He held, also, that in two respects at least the Act had been proved successful:—(1) it had prevented the aggravation of the difficulties which generally arise in times of speculation by the abuse of paper credit, and (2) the principle of the convertibility of notes had been maintained, and a larger supply of gold had been retained in the Bank than would have been likely under the former system.

The suspension of the Bank Charter Act in order to safeguard the commercial credit of the country in a time of financial stress was found necessary again in 1857 and for the last time in 1866.

The crisis of 1857 came suddenly upon the nation after a period of prosperity, and was caused, not as in 1847 by excessive speculation at home, but by overtrading abroad, especially in America, where the gold discoveries had led to an enormous and dangerous extension of credit. There had been also a great deal of speculation in railways, and when the inevitable reaction came and American railway stock depreciated 20 per cent., a hundred and fifty American banks stopped payment. As a great deal of this stock—to the extent it was said of £80,000,000—was held in this country, the Bank of England soon began to feel the drain, and raised the rate of discount to 8 per cent. and 10 per cent. As difficulties increased and English firms began to fail, private banks stopped discounting altogether, leaving the Bank of England as the only source of ready money, and a financial panic arose. Though it was evident to all that a suspension of the Bank Charter Act would be necessary, the Government delayed and did not grant permission for

it until the Bank reserve had been reduced to £581,000, and only granted it then on condition that the rate of discount should not be below 10 per cent. Notes to the extent of £2,000,000 in excess of the statutory limit were issued on this occasion, with the result, as usual, of allaying the panic almost at once.

In 1866 the American Civil War was the main cause of the drain of specie. The direct consequences of this war to England were twofold. In the first place, the use of an inconvertible paper currency in America had caused an influx of gold into Europe which had stimulated business enterprise. In the second place, the stoppage of the cotton trade with America had disorganized both the industrial centres and the money market; it caused a temporary cotton famine in the English manufacturing districts and gave rise to a new trade in cotton with India, Egypt, and Brazil, and as this trade was newly created, the raw cotton had to be paid for in specie. The difficulty was increased by speculation in England. Many new companies—no fewer than two hundred and sixty-three between September and March—had been formed in consequence of the passing of the Limited Liability Act in 1862. Many of these were finance companies, and large sums of money had been advanced to promote great enterprises, such as railways, etc., which could only repay the initial cost after a long period, and their ultimate success was in many cases the only security given for the money borrowed. As too much capital had been absorbed in this way and was temporarily, at any rate, unremunerative, money became scarce and great demands were made upon the Bank. The Bank raised the rate of discount, but a severe foreign drain could not be prevented, for English credit had fallen so low that foreigners who had deposits or investments in England wanted to withdraw them, and bills on England were realized at once at any sacrifice and the proceeds remitted

abroad. Many of the new companies failed, but the failure that caused most excitement and consternation was that of the firm of Overend, Gurney & Co., who stood next to the Bank of England in public estimation and whose liabilities amounted to £19,000,000. May 11th, the day after their failure was made public, was known as "Black Friday" in the City; no one felt safe, there was a run on all the banks, country bankers hurried to withdraw their balances deposited in London, and the Bank of England was besieged by applications for discounts and advances. The *Times* for May 12, 1866, quoted by Gilbart, gives the following account of the crisis in London. "The doors of the most respectable banking houses were besieged, more, perhaps, by a mob actuated by the strange sympathy which makes and keeps a mob together, than by creditors of the banks; and throngs, heaving and tumbling about Lombard Street, made that narrow thoroughfare impassable. The excitement on all sides was such as had not been witnessed since the great panic of 1825; if indeed the memory of the few survivors who shared that panic can be trusted, they compare it with the madness of yesterday. Nothing had happened since the day before to justify such a fear as was everywhere shown. Rumour, however, like the woman in the Laureate's legend, 'ran riot amongst the noblest names,' and left no reputation unassailed. Each man exaggerated the suspicions of his neighbour, and, until a report, at that time unfounded, was circulated in the afternoon, that the Government had authorized the Bank Directors to issue notes to the extent of £5,000,000 beyond the limit imposed by the Bank Charter Act, it seemed as if the fears and distrust of the commercial world had become boundless." It was not the Bank Directors but a deputation from the leading merchants and bankers of the City who asked the Government to sanction the suspension of the Act, and even this step did not

prevent the failure of a good many other houses in the next few days, though some of the firms that were obliged to stop payment in consequence of the extraordinary demands made on them were quite solvent. The crisis of 1866 was the last occasion on which it was found necessary to suspend the Act of 1844.

Hitherto the Bank charter had always been granted for a term of years only, and when the term expired the renewal of the charter was always made the subject of discussion, and concessions of one sort or another were made by the Bank to the Government to pay for the continuance of their privileges. In 1870, however, by clause 72 of an Act to regulate the various denominations of the funded debt, it was enacted that the Bank of England, for the purpose of this Act, "shall continue a corporation until all the public funds are duly redeemed by Parliament." This clause practically continued the Bank charter in perpetuity.

The last important crisis of the nineteenth century was the Baring Crisis of 1890. The years 1888 and 1889 had been years of excessive speculation, when many speculative companies had been formed and money had been freely spent on enterprise abroad—more especially in the Argentine Republic. Before the end of 1889 there was fear of financial trouble, and the Bank rate of discount was raised to 6 per cent., but as the joint-stock banks did not support the Bank of England in this policy, and consequently the market rate of discount did not rise above 4½ per cent., the pressure on the money market was not checked. The most important firm that found itself in difficulties at this crisis was the firm of Baring Brothers, who were unable to meet their liabilities, though they were actually solvent, their assets exceeding their liabilities by £3,000,000. At a meeting held at the Bank, attended by representatives of the leading London firms and banks, it was decided to come to the assistance of Barings, and a

settlement of their difficulties was arranged. This action of the Bank prevented a panic, no suspension of the Bank Act was necessary, the high Bank rate was maintained, and a supply of gold obtained from abroad—mainly from France. This crisis differed from those of previous years in that there was no general alarm outside London, and the failure of credit that generally accompanies such a time was anticipated and prevented. Though some hostility was for the time reawakened against the Act of 1844, the retention of a larger Bank reserve since that time has placed the financial credit of the country on a more secure basis.

In the American crisis of 1907 the soundness of the British system was again vindicated, and the drain of gold to New York was successfully met in November by a Bank rate of 7 per cent.

CHAPTER XI

SCOTCH AND IRISH BANKS

BANKING in Scotland began about the same time as in England. The Bank of Scotland, founded in 1695, is the first instance of a private joint-stock bank, formed by private persons for the express purpose of making a trade of banking, dependent on their own private capital and wholly unconnected with the State. It was founded by twelve merchants—eleven Scotchmen and Mr. John Holland, a Londoner—who obtained from the Scotch Parliament an Act authorizing the Crown to grant them a charter of incorporation, with the privilege of a monopoly for a term of twenty-one years, and with powers of unlimited note issue both in amount and in denomination. The Bank at first received no deposits from the public, and its business consisted in circulating its own notes upon the credit of the subscriptions that were paid in. In 1707, when the Act of Union was passed, it was agreed that an equivalent sum of money should be paid by England to the Scotch to compensate them for any present loss they might sustain by taking their share in the public debt of England, which was larger than their own. The equivalent sum was fixed at £398,000, and it was to be employed to pay off the whole Scotch debt, to dissolve the Darien Company and pay off its shareholders, and to indemnify private individuals who might suffer by the reduction of the coinage of Scotland to uniformity with that of England, which was one of the changes

brought about by the Union. The equivalent fund proved to be insufficient to satisfy all these claims, and in 1719 a sum was set aside by Parliament for discharging them, and the State creditors whose claims had not yet been settled were formed into a corporation. In 1727 this corporation gained from the King a charter, giving them permission to carry on the work of banking as a chartered company with unlimited rights of issue, and took the name of the Royal Bank; the monopoly of the Bank of Scotland, which had expired in 1716, had not been renewed, and the two banks continued to work side by side. It was the Royal Bank which established the system of cash credits or cash accounts, one of the characteristic features of Scotch banking, and one of the causes, it has been considered, of the rapid economic progress of Scotland in the eighteenth century. A cash credit is "a drawing account created in favour of a customer, upon which he may operate in precisely the same manner as upon an ordinary account; the only difference being that instead of receiving interest on the daily balance at his credit he pays interest on the daily balance at his debit" (MacCulloch). All advances on cash credits were made exclusively in the Bank's own notes, the accommodation was granted more readily for a small than for a large amount, and this system made it possible for poor but hard-working traders, manufacturers, and farmers to get the capital they required, and enabled the money lying idle in the country to be used to the best advantage.

As neither of the two chartered banks now enjoyed any monopoly, a number of private and joint-stock banks arose and flooded the country with their notes, which, as they were under no legal restriction, were often issued for sums as low as 5s., and in a few cases even as low as 1s. The result was that before long gold and silver were being rapidly driven out of the country, and, to protect

itself against the dangers attending an over-issue of notes, the Bank of Scotland in 1730 introduced a clause into its regulations making its notes at the option of the directors of the Bank payable, not on demand, but only at the end of six months, promising to pay as well a sum equal to the legal interest from the time of demand to the time of payment. Other banks followed the example of the Bank of Scotland, with the result that, as Scotch notes were practically inconvertible until the six months had expired, they were soon at a discount, and the exchanges became unfavourable. "While the exchange between London and Carlisle was at par, that between London and Dumfries would sometimes be 4 per cent. against Dumfries, though this town is not thirty miles distant from Carlisle. But at Carlisle bills were paid in gold and silver, whereas at Dumfries they were paid in Scotch bank-notes, and the uncertainty of getting these bank-notes exchanged for gold and silver coin had thus degraded them 4 per cent. below the value of that coin" (Adam Smith). In order to remedy the evils resulting from the discredited paper currency and the laxity with which cash credits had been granted, the two great chartered banks combined to get an Act of Parliament passed in 1765, suppressing all notes under the nominal value of 20s., prohibiting notes issued under the optional clause and payable only at the end of six months, and making all notes payable to bearer on demand. After this measure was passed the banks curtailed their cash credits, and the currency was restored to par and has not varied since. Great distress was caused all through Scotland in 1772 by the failure of the Ayr Bank, which had continued the policy of granting cash credits too profusely, and the commercial crisis of 1793 was extended to Scotland, the chief cause in Scotland, as in England, being the multiplicity of small banks. In 1797 the leading Scotch banks agreed to follow the example of the Bank of England and suspend the pay-

ment of specie. Great alarm and confusion was caused by this at first, and the banks were besieged by people demanding cash in exchange for notes, but the issue of Spanish dollars stamped by the Mint, the division of £1 notes into halves and quarters, and the issue of 5s. notes for a limited period provided a supply of circulating medium, and confidence was quickly restored.

After the crisis of 1825, when £1 notes were prohibited in England, an inquiry was held to determine whether it would be advisable to extend the prohibition to Scotland as well, but the result of the inquiry was so favourable to the Scotch banks that the question was dropped. The Report of the Lords stated that between the years 1766 and 1797, when no notes under the value of £1 were allowed in England, notes for £1 and £1 1s. were freely circulating in Scotland without any inconvenience, that "the issue of paper of that description has been found compatible with the highest degree of solidity, and that there is not, therefore, while they (the banks) are conducted upon their present system, sufficient ground for proposing any alteration with the view of adding to a solidity which has so long been sufficiently established."

At a somewhat later date a Scotch banker spoke again in high terms of the advantages derived from the general use of these small notes. "Our £1 notes connect and familiarize every artisan and labourer in the country with our banking establishments, and the implicit confidence in our paper currency thus created and perpetuated by the general experience of the sufficiency of our banks has on many occasions been remarkably illustrated. It is no exaggeration to say that at this moment nine-tenths of the labouring classes of Scotland, if they had a choice, would prefer a £1 note to a sovereign."

Hence there was no legislative interference with the Scotch banks until the principles of Peel's Bank Charter Act were extended to them with some modifications in

1845. As in England, no banks except those already in existence were to be allowed in future to issue their own notes, and the banks which were still allowed to continue their issues were not to extend the amount of their note circulation beyond the average for the previous year; there was, however, no absolute limit fixed, as in the case of the English banks, for they might increase their issues provided they held an amount of coin or bullion in stock corresponding to the increase of the note issue above the authorized amount. Also, if any two or more banks united, they might have an aggregate authorized note issue equal to that of the separate banks before they amalgamated. It was expressly declared that notes of the Bank of England were not to be legal tender in Scotland.

The failure of the Western Bank in 1857 was due, not to defects in the Scotch system, but to the neglect of the usual safeguards, for this bank had worked on the principle of employing an undue proportion of its assets and deposits in discounting bills, keeping only just sufficient money in hand for current expenses. So clearly was the risk involved in this method of doing business recognized, that in 1838, when the Western Bank applied to the Board of Trade for a grant of letters patent, the other Scotch banks sent up a joint memorial to ask that this demand should not be granted, pointing out that the Scotch banking system was established on sound principles and that the Western Bank by departing from these principles was a public danger. "The safeguard of the Scotch system," they said, "has been the uniform practice adopted of retaining a large portion of the capital and deposits invested in Government securities, capable of being converted into money at all times and under all circumstances." The Western Bank was able by its methods to make large profits and to do business on more favourable terms, "but in its results it endangers the existence of every bank in the country and the fortunes of

a large portion of the community. . . . If letters patent are granted to this bank, after what has passed, it will be a public sanction and countenance of a new and mischievous principle opposed to the banking system of Scotland" (Conant). The charter was not granted, and the bank continued the same reckless policy for some years and then failed completely. In 1878 the City of Glasgow Bank collapsed for very similar reasons. In 1879 the principle of limited liability was extended under certain conditions to banks, and most of the leading Scotch and English banks were registered under this law.

The Scotch banking system has done a great deal to stimulate industry and encourage thrift among the people, and has contributed in no slight degree to the economic prosperity of the country. There is more uniformity among the Scotch banks than among the English, and they are fewer in number; their capital is large in proportion to their note circulation, and by means of numerous branches banking facilities are widely distributed throughout the country. The system of small note issues enabled people to undertake many commercial and agricultural transactions that scarcity of money would have rendered impossible otherwise, and it was asserted that if small notes had been abolished, the additional expense of transmitting gold would have rendered it impossible to keep some of the smaller branch banks open. The system of cash credits was often an invaluable aid to men starting in business. The amount allowed was generally from £200 to £500, and was intended "as a working capital for men of good character engaged in trade and agriculture." In the case of every loan a borrower had to find two men of well-known character and respectability who would be surety for him, and who could at any time withdraw their security if they considered his business unsatisfactory; thus cash credits acted as an encouragement to honest and steady trade.

The system of granting interest on all deposits brought into active use the available savings and capital of the country, and stimulated saving among the poor. As the branch banks brought banking facilities to the smallest towns, Scotch tradesmen generally kept in hand nothing more than what was required for current expenses, and surplus notes were returned to the banks almost at once. The Act of 1845 had increased the cost of banking, and, when in 1892 interest on current accounts was discontinued and in 1895 the rate of interest fell to as low as 1 per cent., there was not the same motive for saving as before. The Scotch banks have paid only moderate dividends to their shareholders, and have secured public confidence by the extent of their capital; by attracting small deposits by the systems of small note issues and of cash credits, they have been brought into closer connection with small traders and producers than in England, and have played an even more important part in the development of industry and trade.

Ireland, from early times, was supposed to have the same currency as England, but, though in the time of the Plantagenets we read not infrequently of money being coined in England for use in Ireland, it is very doubtful how far this money was in general circulation beyond the narrow limits of the English Pale. At the time of the recoinage of Elizabeth's reign it was suggested that a suitable method of dealing with the debased currency would be to send over to Ireland the coins that were thought to be too bad for circulation in England, but the suggestion was not acted upon. Yet in the reigns of both Elizabeth and James II Ireland was flooded with base money, with the object in the former reign of impoverishing the rebels, in the latter of impoverishing the Protestants, and as a result full-weight coins were driven out of circulation. Scarcity of money was a constant difficulty in Ireland, for the payments to absentee land-

lords and to the Crown were a serious drain on its resources, and the English Government would neither allow coin to be sent to Ireland nor permit the Irish to have a Mint of their own, even to coin money of exactly the same standard of weight and fineness as the English. The patent granted to Wood in 1724 to provide a copper coinage for Ireland allowed him to coin 30 pence from the pound weight of copper instead of 24, as in England, and indignation was roused in Ireland, partly because many of the coins issued were not even up to the standard provided for in the patent, partly because, though a small currency was badly needed, the quantity to be supplied and for which Ireland would have to pay far exceeded the requirements of the country. It was not until 1825 that the currency of Ireland was assimilated completely to that of England. At that time Ireland had the English pound sterling and the English denominations, but the English shilling was current in Ireland for thirteen pence instead of for twelve, and thus the English pound sterling was the equivalent of £1 1s. 8d. of the currency of Ireland. As inconvenience and confusion were often caused by this difference, English gold and silver coins were ordered to be current in Ireland at the same rate of pence as in England; at the same time it was ordered that Irish copper coins were to be called in and were to cease to circulate in Ireland.

The poverty of Ireland and the consequent absence of the will or the power to save amongst the people prevented the early development of a banking system. In the seventeenth century brokers acted as bankers and goldsmiths and traders made a practice of issuing promissory notes against deposits of coin. An Act of 1709 gave legal recognition to these notes, but no laws were passed to regulate their issue or to prevent fraud and failure. It was not until the middle of the eighteenth century, when a large number of failures had occurred

and had been attributed by a Committee of the Commons to the establishment of banking businesses by persons with insufficient capital, that some attempt at regulation was made, but little improvement was effected.

In 1695, just after the formation of the Bank of England, a memorial was presented to the Irish Parliament by the principal merchants of Dublin, recommending the establishment of a public joint-stock bank "as a fund of credit for the encouragement of trade and supply of the present want of money." Nothing was done, however, and the scheme remained in abeyance until 1782, when a bank was chartered by an Act of Parliament under the name of the "Governor and Company of the Bank of Ireland." The charter was granted for twelve years at first, but the term was afterwards extended, and the capital stock, which was fixed at first at £600,000, was soon increased; the bank stock was to be transferable, and the bank was not to charge more than 5 per cent. on loans and discounts, and not to incur debts to a greater amount than its capital. A monopoly was granted, and no other company with more than six partners was to issue notes payable on demand or payable at any less time than six months; this restriction was continued until 1821, when it was relaxed except for the districts within a radius of 50 miles of Dublin.

The suspension of cash payments in 1797 was extended to Ireland, but apparently only for the sake of uniformity, for, as the reserves of the Irish Bank were not encroached on for the necessities of the Government, there was no special demand for gold in Ireland and hence no need for such a measure. The effect of the suspension was, as in England, to bring about a disastrous inflation of note issues, and the note circulation, which in 1797 amounted to only £621,927, rose by 1813 to £4,212,600, and by 1828 to £6,309,300. As a result silver soon disappeared from circulation even for subsidiary purposes, and as early as 1804 the exchanges began to turn

against Ireland, though for some time the exchanges on London remained favourable as the condition of the English currency was so bad. The Bank of Ireland made large profits on its forced note circulation, and in 1805 it was able to pay dividends as high as 12½ per cent., but great difficulty was caused by the excessive note issues of many small firms and individuals, most of whom had little or no capital as a foundation, and whose notes were for the most part worthless. Yet the demand for currency was so great that large quantities could be easily floated, and great distress was caused when many of these banks collapsed about 1820. In 1821 cash payments were resumed, and the relaxation of the Bank monopoly made a more stable system of country banking possible.

In 1824 the Provincial Bank of Ireland was founded by a few English capitalists and in 1827 it was granted the privilege of receiving the revenues of the excise, etc., outside the Dublin area. The branches of this bank and of the Bank of Ireland were soon extended throughout the country, and several other joint-stock banks were formed as well, the most important being the National Bank, founded by O'Connell in 1835, and afterwards known as the Liberator's Bank.

The Bank Act of 1845 applied to Ireland as well as to Scotland, and the regulations about the issue of notes by private and joint-stock banks were much the same for both countries, except that in Ireland notes have from that time been payable at the place of issue, whilst in Scotland they are only payable at the head office of the bank issuing them. Banks could be now freely opened for discounts and deposits, but not for note issues, and after December 6, 1845, the note circulation was not to exceed, on an average of four weeks, the average amount for the year ended May 6, 1845. If two banks united, they might retain the aggregate circulation of both banks, and if a bank surrendered or withdrew its issues the Bank

of Ireland might increase its issues to the full extent of the notes withdrawn. In one respect the laws were different from those of England, namely, that not only the Bank of Ireland but all other banks of issue were authorized to increase their note circulation against deposits of coin and bullion, but this privilege has not been much used. The issue of notes under the value of £5 is allowed, but notes of the fractional parts of £1 were prohibited by the Act of 1845. The Bank of Ireland still continues as a corporation, but without any exclusive privileges; it is the Government bank, and both in its institutions and its government it has closely followed on the lines of the Bank of England. It has branches in the principal towns throughout Ireland, and it has, like the Bank of England, done a great deal to supply the country with a reliable paper currency, to support public credit, to grant facilities for trade, and to assist the financial operations of the Government.

The chief authorities consulted for this chapter are Conant, "History of Modern Banks of Issue," and Macleod, "Principles of Banking."

CHAPTER XII

MODERN BANKING

The modern system of banking in England is still regulated by the principles laid down in the Bank Charter Act of 1844, though in some respects the working of the Act has been modified by changed conditions. The Bank of England has become, as it was clearly intended by the Act that it should become, practically the sole bank of issue. By the end of the nineteenth century only thirty-three private banks and twenty-seven joint-stock banks with the right of issuing their own notes remained in existence, and the total value of the notes issued by them only amounted to £1,169,760—less than half the amount they were authorized to issue by the terms of the Act. The note circulation of the country now is supplied entirely by the Bank of England and its branches; notes issued at a particular branch are payable in cash only at that branch or in London, and bank-notes issued at the head office cannot be cashed on demand at the branches. The branch banks carry on all the ordinary business of local banking. They receive deposits payable on demand, and they lend money in various ways—by opening credit accounts in their books, by discounting bills, by purchasing or advancing money on securities, etc. One of the most important services they perform is the remittance of the revenue which is paid in to them, credit being then immediately given for the amount in the Exchequer account in London. Private and joint-stock banks now

treat bank-notes—that is, the credit they have at the Bank of England—as their capital, and depend upon the Bank of England for their gold reserve, keeping only enough cash in hand to supply their current needs.

One great change that has taken place in the financial world since 1844 has been the enormous development of credit, in which the banks have played an important part. Formerly on making deposits, people used to lodge coin in a bank, the bank allowing them notes to the amount of the money deposited. Now the money placed in the banks consists for the most part of some form of credit; the bank lends money, discounts bills, etc., and takes in exchange for the money it hands over some sort of paper security, while debts are generally paid by the transference of credit from one person to another. Bagehot notes the great extent to which English trade was, when he wrote, carried on with borrowed capital: "In modern English business, owing to the certainty of obtaining loans on discount of bills or otherwise at a moderate rate of interest, there is a steady bounty on trading with borrowed capital and a constant discouragement to confine yourself solely or mainly to your own capital," and he notices that one result of this is what he describes as the increasingly democratic character of English trade—the substitution of a large number of new firms with small capital for the long-established firms of earlier days. The banks, by the facilities which they have given for the distribution of capital, have had great influence in bringing about this change, though they have not, as is sometimes supposed, any direct influence on the formation of capital; by the extension of credit they can make a given amount of capital go a great deal farther than it would go otherwise, because they can keep it continuously employed, and prevent it from lying idle.

The instruments of credit, by means of which this work is carried on and the use of coin economized, are notes,

cheques, bills of exchange, and other forms of securities—all, however, having this feature in common, that they are dependent for their value and acceptability on the facility of their conversion into coin, or on the certainty that coin can eventually be obtained for them.

A bank-note is a "promissory note, made by a banker, payable to bearer on demand and intended to circulate as money" (Chalmers). The special feature of notes is that the responsibility for cashing them rests entirely with the bank of issue, quite regardless of the solvency of the individuals who hold and pass them. At the present time, when the only notes in circulation are the legal tender notes of the Bank of England, people are accustomed to regard them as actual money, and there is a tendency to overlook the fact that they have a credit aspect as well, for they represent credit at the Bank of England, and are only accepted as money because the public has absolute confidence in the power of the Bank to cash on demand any notes that may be presented to it.

A cheque is a draft or a bill on a banker payable on demand. In this respect cheques are like notes, but they differ from them in the following ways:—(1) they are not legal tender, and hence they need only be accepted in payment of a debt at the pleasure of the creditor, and cash for them can only be legally demanded at the bank which issues them; and (2) the convertibility of cheques into legal tender money depends upon the solvency of the drawer of the cheque as well as on the solvency of the bank. The bank is under no obligation to cash a cheque if the drawer of the cheque has overrun his account, and so has no money in the bank to meet it; or, in other words, the money used to cash the cheque is not taken from the general funds of the bank, but merely from the money placed to the account of the individual who draws the cheque. Thus there is not the same certainty of or facility for obtaining money in exchange in the case of cheques as in the case of

notes, but for that very reason there is less chance of fraud and robbery, for they can be more easily traced, and a cheque is in itself a receipt and record of payment. Moreover, cheques are more convenient, for they can be made out for any amount, whilst notes are only issued for round sums, and a cheque is more easily and safely carried about than a roll of bank-notes. The use of cheques has increased greatly since 1844, and, as has been already explained, has prevented the inconvenience that would otherwise have arisen from the restriction of note issues. By far the greater number of cheques are never presented for payment at all, but are crossed off against one another in the Clearing House.

A bill of exchange is "an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to, or to the order of, a specified person, or to bearer" (Byles). Bills of exchange are used to transmit money from place to place and to transfer debts from one person to another, and, like all other forms of credit, they economize the use of coin. Bills of exchange, as credit instruments, are not so distinctly money as either notes or cheques, for they are issued not always against actual money, but against produce "on the point of passing into consumption," or, in other words, against goods ready for sale, but not yet actually sold; hence, as the transaction which gives rise to the bill is not completed when the bill is issued, it is only convertible into money at a future date. It is generally possible, however, to convert it into money at once, but not for the full amount, for it is necessary to pay for the accommodation of getting ready money for a future claim; so when a bill is discounted—that is, when ready money is paid for a bill due at a future date—a percentage is

deducted according to the time that it has still to run before falling due. This facility for obtaining ready money on debts due at a future time enables a trader to carry on a much more extensive business than he would otherwise be able to do. Bills are also of use in fixing definite periods for the payment of debts and affording easy proof of the debt in a court of law. On the other hand, the facility with which they can be drawn involves in itself an element of danger, for it has been found possible to carry on a profitable business by issuing them not only against actual produce but in anticipation of produce—to issue them, for instance, against goods not only unsold, but not yet ready for sale; or, by a further step, to create bills out of nothing at all for the mere purpose of discounting them and getting ready money. The name of finance bills is given to a large class of bills issued on securities only, which often cannot be easily converted into money, and it is very difficult to tell from the form of a bill whether there is any real value behind it. In dealing with bills the bill brokers form an intermediary class, whose work it is to buy bills from those who have them to sell and to dispose of them to bankers or to other merchants. In modern times the credit of the bill broker is a matter of the first importance, for the broker, in accepting a bill and passing it on, endorses it as a guarantee of its ultimate payment; his name often bears more weight than that of the original drawer of the bills, and instead of relying, as in former days, on the value of the bill itself, people rely now on the judgment and good faith of the broker who guarantees and passes it.

Other forms of security which are used as credit are promissory notes, Exchequer bills, bonds of foreign Governments, shares in companies, etc.; in fact, acknowledgments given on money invested in any form of public or private enterprise. Government securities

any amount of money can be well and easily employed, and the stationary and declining districts, where there is more money than can be used."

Since the Franco-Prussian War the Bank has, as well as keeping the gold reserve for the rest of the country, acted to a much greater extent than before as the Banker of Europe, and has tended to become the "sole great settling house for exchange transactions in Europe." The main reason for this is that England is the only country where there is practically free trade in gold, and where there is always a certainty of being able to get gold on demand in exchange for paper securities. It is always possible to borrow money in London "at a price," though the price varies with the value of the security offered in exchange, and, generally speaking, money can be obtained there more easily and cheaply than anywhere else in the world. Moreover, the Bank of England, except with regard to the issue of notes, is left unrestricted by the Government, and the system of banking in England is consequently freer and more elastic than in most other countries.

As a result of making use of the Bank for purposes of exchange foreigners have found it convenient to keep deposits in London as well. The extent of these deposits depends upon the credit of the country, and one of the first results of any serious panic would be the withdrawal of large sums from the country by foreign depositors; thus in any time of difficulty the Bank reserve is liable to be drawn upon not only by the rest of England but from all quarters of the world.

It is these vast liabilities of the Bank that have led many economists to the conclusion that the gold reserve is now dangerously small. In 1901 the reserve of the Bank of England, by which is meant its stock both of gold and notes, was only 2·71 per cent. of the total sum of deposits in England—that is, of the ultimate total liability

of the Bank itself. Between 1880 and 1890 the reserve averaged only £13,000,000, and varied from £9,000,000 to £19,000,000, and Goschen pointed out that the metallic reserve of England was very much smaller than that of other countries—that while England had a reserve of only £21,000,000 or £22,000,000, France had a reserve of £95,000,000, Germany of £40,000,000, and the United States of £142,000,000. He pointed out the danger of this system, because in times of crisis it is difficult to attract gold rapidly; but the banks and the general public had such complete confidence in the Bank and in the certainty of Government support in case of any difficulty that they had come to regard the amount of the reserve as a matter of little importance. After the Baring crisis the reserve was increased, and between the years 1895 and 1900 it averaged £25,751,000, varying between £23,000,000 and £28,000,000. Since then the tendency has been upwards.

Taking into account the enormous liabilities of the Bank, it is evident that the Bank reserve is of the first importance, and it must be remembered that, small as it is, the Bank has very little direct control over it. In the first place, it is always bound to receive gold whenever it is offered to it, quite regardless of the amount already in its vaults. Uncoined gold of the recognized standard—22 carats fine—in the shape of bars is received at the Bank and notes given in exchange at the rate of £3 17s. 9d. per ounce, and these notes can be exchanged at the banking department for gold coin. Any one bringing gold to the Mint has the right to have his own gold returned to him in sovereigns, after it has been assayed, at the rate of £3 17s. 10½d. per ounce, but as a rule people do not care to take advantage of this and are willing to pay a little more to secure the advantage of getting the money at once without any further trouble and delay. In the second place, in addi-

tion to the obligations imposed on it to accept all gold brought in, the Bank is bound to cash all notes presented to it, and it has no control over the withdrawal of deposits; thus in a time of difficulty it may find its gold reserve being steadily drained away without being able to take any direct measures to prevent it. There is only one course that the Bank can take that will indirectly affect the movements of bullion, and that is to alter the Bank rate of discount. By the Bank rate of discount is meant the lowest official rate at which the Bank will discount bills, and this rate is generally higher than the market rate. The Bank, however, does not always keep to the official rate itself; it discounts bills at the market rate at its branch offices, for if it did not it would get no business, and it discounts bills even at the head office at the market rate for its own customers. Hence in ordinary times the official rate is not effective in regulating the price of money. But sometimes, when the Bank finds it necessary to raise the rate of discount to prevent the foreign exchange turning against England at a time when money is too plentiful, it borrows money itself and thus makes an artificial scarcity; the market rate of interest then rises, and the money withdrawn from circulation by the action of the Bank can only be obtained at the official rate of discount. Generally speaking, the market rate of interest is more effective in regulating the price of money than the Bank rate, with the result that in ordinary times the Bank finds it very difficult to increase its reserve when the price of gold is declining, because the operations of other banks drive gold abroad. The average Bank rate in England between the years 1845 and 1900 was £3 12s., and it is generally rather higher in the winter than in the summer. The Bank rate in England fluctuates more rapidly than the official rate in other countries, because London from its position as an international clearing house is subject to great and unexpected

demands, and a rise in the rate of discount is the only way in which such demands can be effectually resisted.

The close connexion between the rate of discount and the rate of the foreign exchanges has already been noticed. When the rate of discount is low money is cheap, and gold tends to go and to stay where money is dear, for where it is cheap people borrow freely for commercial purposes, large numbers of bills are sent to be discounted, and money flows rapidly out of the country. The rate of exchange, however, is affected by the balance of trade—that is, by the quantity of imports as compared with exports—as well as by the price of money, and for this reason and as a result of the conditions of trade the exchanges are generally favourable to England. "England is the place of settlement for the whole world; what is wanting in India, in the Brazils, etc., gets settled here; and suppose you import iron from Sweden—if you receive £1,000 worth of iron and manufacture it you will then get £10,000 for it, and then, when it is manufactured, it is sent to all the world. Suppose you get cotton from America—the cotton costs there 3d. or 6d. per pound, but when it is manufactured that pound of cotton is worth four times as much. In the regular course of things the exchanges with every country must be in favour of this." England is no longer the only great workshop of the world, as it was when Rothschild wrote this passage in 1832, but it is still far the greatest shop, emporium, bank, and storehouse of capital and credit. Hence it always imports far more than it exports, the difference being made up by what are known as "invisible exports" in the shape of credit and loans on which other countries have to pay interest, and by the profits of the carrying trade.

The management of the Bank is under the control of the Directors, who form the Bank Court and who are practically appointed by co-option, though they are nominally

chosen by the proprietors. The Directors are generally members of leading London firms; they are not bankers themselves, and the qualification required is merely the possession of £2,000 worth of Bank stock. The Governor of the Bank, who holds office for two years, is generally one of the senior members of the Board of Directors; he must have served two years previously as deputy governor, and after his term of office is over he retires into the Committee of the Treasury, whose work it is to advise the Governor. It is complained that the element of permanence is wanting in this system, and that it is not wise to give the control of the Bank to a body of amateurs who cannot give their whole time and attention to the work and whose composition is constantly changing; and it has been suggested that though it might be dangerous to give the post of Governor to a permanent official, because of the enormous influence he might be able to wield, it would be quite possible and probably advantageous to have a permanent official in the post of deputy governor. The close connexion between the Government and the Bank has also given rise to adverse criticism. The Bank is not a State institution, but it was created by State aid, and as it is the bank in which the Government funds are deposited, the Government has an interest in its security. The idea that the Bank could always depend on Government support in times of crisis has perhaps led people to attach less importance than they might to the serious disproportion between its reserve and its liabilities. The Bank acts, in fact, in two capacities—as a national bank which ought to be managed solely in the public interest, and as a private company which has to consider the interests of its shareholders—and these two aspects of its functions are to a certain extent antagonistic. In the national interests the security of the Bank should be safeguarded as far as possible by maintaining a sufficient reserve, whilst on the other hand, this

policy, by keeping a large stock of money in the Bank vaults, which is consequently unremunerative, reduces the dividends to be paid to the shareholders.

Notwithstanding the criticism that has been brought against the Bank and against some of the main principles of the Act of 1844, yet its work has gone on steadily since that time, and of late years without the catastrophes and recurrent periods of crisis that marked the early and middle parts of the nineteenth century. "From 1870 to the present day England and the Bank of England have been successful in playing their part without a suspension of the Act of 1844, and this during a quarter of a century characterized by activity of business and by financial and commercial crises. The Bank has always been able, in fact, to supply gold to those who demanded it, not only to settle extraordinary purchases of cereals and commodities, but for foreign loans and investments. All that it has done has been to charge more highly for the gold at certain times. Under the influence of general conditions, and also of the Act of 1844, the position of the Bank of England has become much more definite. Strictly speaking, it does not supply credit facilities. Its function is to be the general repository for the cash reserve of British trade and finance, and even ultimately of the trade and finance of the world" (Leroy Beaulieu).

CHAPTER XIII

BIMETALLISM IN THE NINETEENTH CENTURY

Until the nineteenth century there had been, since the discoveries of the sixteenth century, considerable steadiness and uniformity in the production of the precious metals Throughout this period the production of silver had been much greater than that of gold, for, though after the middle of the seventeenth century the yield of the Potosi mines had decreased, larger supplies were coming from Mexico Towards the end of the seventeenth century more gold was obtained from Brazil, but it was not until the middle of the nineteenth century that any great increase in production took place At that time the discoveries of gold in California and Australia added enormously to the gold supplies of the world, and between the years 1850 and 1880 as much was produced as in the three and a half centuries before The amount was greatest between the years 1852 and 1856, when the value of the average annual production was estimated at £29,000,000, from 1857 to 1861 the average value was £25,000,000, and then it gradually decreased, until between 1881 and 1890 it had fallen to £21,738,000 Since that time it has increased again, partly as a result of the application of the cyanide process, which enabled otherwise unremunerative mines to be worked with profit, partly because the gold supply is now drawn from so many different sources—from the Transvaal and the Klondike, India and British Guiana, as well as from Australasia and the United States.

In 1892 the value of the gold production of the world was again over £29,000,000, in 1896 it was £41,539,355, in 1903 £68,440,000, and between 1899 and 1908 it averaged £54,740,000 a year.

The increase in the production of gold caused a distinct, though moderate, rise of prices, and it was estimated that gold fell in value about 9 per cent. Prices, which had ranged high in the early years of the nineteenth century, had fallen after 1818, and had reached their lowest point between the years 1849 and 1852. The average prices for the year 1858 were 18 per cent. above those for 1852, and Jevons estimates that between the years 1849 and 1865 the average rise was 21 per cent. It is difficult, however, to determine the exact part played by the increased gold supply in the movements of prices, because they were affected probably to a greater extent by other economic conditions. The great industrial development, the decreased cost of production, the increase of population, would all have tended, if there had been no counterbalancing cause, to bring about a fall of prices, and the result of the gold discoveries was to neutralize the effects of the industrial and commercial expansion; hence the rise, though distinct, was not great.

The relative value of gold and silver was only slightly affected by the gold discoveries. The average market price of silver had for the ten years before 1850 been a little over 4s. 11d. per ounce, and between 1850 and 1860 it had only risen by about 2½d., the average price for the decade being 5s. 1¾d. per ounce. This was due partly to the causes already mentioned, which prevented any great general rise of prices, partly to the fact that gold and silver are to a certain extent interchangeable, and consequently, as gold fell in value, it was for some purposes substituted for silver. A very marked and rapid change in the gold value of silver was, however, caused by the great increase in the production of silver after 1870. As a

result of the large additional supplies, coming mainly from the Nevada mines, the value of the annual average production was raised from £8,000,000 or £9,000,000 in the middle of the century to £15,000,000 in 1875, and the price of silver, which up to 1873 had varied very little from 5s. per ounce, fell during the year 1876 from 4s. 8½d. per ounce in January to 4s. 4d. in June, and to 4s. in July. The average price for the years 1875 to 1880 was 4s. 4¾d., and after that it steadily declined, the average for the years 1900 to 1905 being 2s. 2d.

It was not, however, generally considered that this fall in the value of silver was caused to any considerable extent by the increased supplies, for the amount of silver imported into England from the United States remained almost unaltered after 1873, and the price of silver was already declining before the new supplies began. It was thought to be due partly to the disturbance of the market caused by these changes, to the uncertainty of the price and to the fear of a still greater fall; but the main causes were undoubtedly the displacement of silver by the introduction of a gold standard in several of the European countries and the reduction of the demand for silver to be sent to India. The adoption of a gold standard by Germany in 1872 absorbed gold to the value of £80,000,000, and set free enormous quantities of silver; the resumption of specie payments by the United States swallowed up another £80,000,000 worth of gold; France was practically substituting a gold for a silver currency, and gold standards were adopted as well by the Scandinavian countries and by Holland. These changes meant that over a large part of the civilized world silver ceased to be used as money, and the increased demand for gold for currency purposes not only prevented prices from maintaining the level they had reached in 1860, but was one of the causes of the steady fall after 1873.

The fall of prices and depression of trade coinciding

with the great depreciation of silver gave rise to the opinion that the demonetization of silver was the main cause of the commercial difficulties of the time, and to the suggestion of bimetallism as the only possible remedy. As a reaction probably against the confusion caused by mediæval bimetallism, the economists of the seventeenth, eighteenth, and early nineteenth centuries had all been in favour of a single standard, and the question on which they had disagreed was merely whether that standard should be gold or silver. Now that the old mercantilist ideas about money had disappeared for good, and it was no longer thought that a nation's prosperity depended on its annexation of the largest possible share of the world's stock of bullion, bimetallism was suggested again. This time, however, the system was to be based on international agreement, not on international rivalry, and it was realized that the common consent, if not of all, at least of a good many civilized countries would be necessary in order to secure perpetual interchangeability of the metals.

The arguments brought forward in favour of bimetallism were all based on the assumption that a common agreement between nations on the subject was possible, and the advantages expected to be derived from it were mainly an increased steadiness of prices and of the foreign exchanges, with corresponding benefits for trade. (1) The double-standard, it was said, would in the long run steady prices, for, though the use of two metals might involve more frequent fluctuations in the value of money, they would not be as violent as under the present system, as the fluctuations of the two metals would counterbalance each other, and thus the value of the two taken together must be steadier than the value of one only. (2) Bimetallism would benefit trade, for it would be a step in the direction of a universal currency, and to have a settled and uniform ratio between the metals would facilitate

the exchanges between different countries. (3) Under a bimetallic system the quantity of money in circulation would be greater, and this would help to maintain a high level of prices favourable to industrial prosperity, moreover, it was feared that if the present tendency in favour of an exclusive gold standard were continued, gold would soon be seriously appreciated, and there would be a scarcity of the circulating medium which would heavily handicap the commerce of the world. The bimetallists believed that the value of money depended only slightly on the cost of production, and that it could be determined, partly at any rate, by legislation. It was the province of legislation to determine what substance should be used as money, and hence they thought it possible to fix a ratio between the two metals, as near as possible to the market ratio, and to maintain it by international agreement. Moreover, they believed that this international ratio would tend to prevent violent fluctuations in the market ratio, and that at the ratio of $15\frac{1}{2}:1$ the two metals could be kept permanently in circulation. Even if universal agreement could not be obtained, the agreement of several of the chief countries of the world would be an enormous advantage, for they could act as intermediaries between the gold-using and the silver-using countries.

Monometallists, on the other hand, considered that the effect of the double standard in increasing the steadiness of prices and of the exchanges would be only slight, and based their opinion on the ground that the steadiness both of prices and of the exchanges depends on various causes, of which the metallic currency is only one. Prices are affected by the condition of credit and by conditions of industry generally, whilst the exchanges are affected by the balance of trade as much as by the movements of money, moreover, the development of paper money and various forms of credit has made the

question of the metallic currency one of much less importance than in former days The monometallists also denied that the quantity of money in circulation would be increased, for under bimetallism there would only be the same quantity of metal in the world, though the two metals might be more evenly distributed, at the same time they denied altogether that an increased amount of money in circulation, even if it could be brought about, would be in itself an advantage unless it were accompanied by a general expansion of trade Some difficulty had certainly been caused by the too rapid adoption of a gold standard over a considerable part of the civilized world, but the difficulty was only temporary, and no permanent or serious appreciation of gold was to be feared The monometallists attributed more importance to the cost of production and less to the action of the State in determining the value of money than the bimetallists, they thought that it would be absolutely impossible to keep the ratio between the two metals steady, that the legal ratio would, as in mediæval times, be constantly varying from the market ratio, and that one metal would consequently always be at a premium Hence, unless bimetallism were universally adopted, which was not a possibility that could be contemplated in the near future, it would not mean that the two metals would be kept in circulation concurrently, but that they would be in use alternately, the cheaper metal always tending to flow out of the country These constant alternations would be bad for trade and would involve the necessity for constant recoinage on the part of the Government

The currency history of France in the nineteenth century affords an illustration of the effects of the bimetallic system when adopted over a comparatively small area The French currency law of 1803 altered the denominations of the coins, but, as far as the metals

were concerned, maintained the bimetallic system that had been in use for centuries The silver franc was taken as the monetary unit, gold coins to the value of twenty and forty francs were struck, and both gold and silver coins were to be legal tender at the ratio of 1 15½, the coinage of both was to be free and unlimited, and all seignorage charges were abolished From 1820 to 1850 silver at the ratio of 15½ 1 was overvalued, and consequently there was a profit on bringing it to the Mint to be coined, the overvalued silver drove gold out of circulation, and France was practically a silver using country About 1850, as a result of the gold discoveries, there was an alteration in the market ratios, 15½ ounces of silver having now a greater intrinsic value than 1 ounce of gold This meant that gold was overvalued by the French Mint, hence it was cheaper to discharge debts in gold in France and to use silver for foreign payments Merchants bought up with silver all the gold they could obtain, gold poured into France and silver flowed out By 1859 gold to the value of £100,000,000 had been absorbed by France, and large quantities of silver had left the country After 1865 the commercial ratio changed again, and now silver was once more overvalued at the French Mint, making it more profitable to import silver than gold, and consequently between 1865 and 1875 gold left the country, the net imports of silver amounting to £65,000,000

The Latin Union was formed between France and the countries which had adopted the same monetary system as France—Belgium, Switzerland, Italy, and Greece—in order to demonetize the smaller silver coins, which were often much depreciated in value Henceforth in these countries no silver coins under the value of 5 francs were to be legal tender, the identity of the standard and weight of the coins was guaranteed, and there was to be free and unlimited coinage of gold coins and silver

five-franc pieces for all who brought metal to the mints. The fall in the value of silver after 1865 brought a rush of that metal to the mints of the Latin Union; as these countries were being rapidly drained of gold, a general desire for a single gold standard was expressed at a monetary conference held at Paris in 1867, and probably it was only the outbreak of the Franco-German War that prevented the change from taking place. Though the gold standard was not adopted, it was found advisable to restrict the coinage of silver. Belgium first passed a law enabling the Government to suspend or limit the coinage of five-franc pieces, and in 1876 France suspended the minting of these coins altogether, which meant practically the adoption of a gold currency. The position of these countries since that time has been that silver five-franc pieces are still legal tender, and continue to pass current as such, but the State has ceased to coin silver on private account.

Thus France under a bimetallic régime had not been able to keep the two metals in use concurrently. The result of allowing the unlimited coinage of both metals had been that the mint was constantly coining the metal of lesser value, that this metal when coined was used to displace the metal of higher value, and the country was always being drained of either gold or silver. It certainly acted as an intermediary between countries using single standards—for instance, in the cotton famine the silver sent to the East to pay for the fresh supplies of cotton was obtained mainly from France; yet this advantage was obtained at considerable expense to France itself—the expense to the Government of constant recoinage, loss to creditors, who often found themselves paid in a depreciated metal, and loss to the nation, whose trade suffered through these constant alternations of the currency.

The question of bimetallism came very much more to

the fore towards the end of the century. Bimetallists held that it was the closing of the mints of the Latin Union to silver, and the untying of the legal bonds which held the two metals together, that had been one of the main causes of the great fall of silver. It is generally acknowledged that the French law had helped "to keep gold and silver at a nearly invariable price as compared with one another" (Jevons); yet monometallists argued that the fall of silver had begun before the closing of the mints and that it was the strain of these commercial changes of value that had caused the bimetallic system to break down. Several international conferences were held to discuss the advisability of bimetallic agreements between the Great Powers, but no very definite conclusions were arrived at.

At a monetary conference held at Paris in 1878 the American delegates asked the other States to join in a scheme for the free coinage of silver. In the report of the American Commission it was stated, "that it is not to be desired that silver should be excluded from free coinage in Europe and the United States of America; on the contrary, this assembly believes it is desirable that the unrestricted coinage of silver and its use as money of unlimited legal tender should be retained where they exist, and as far as practicable restored where they have ceased to exist." Hence they recommended free coinage of silver at a ratio to be agreed upon, and "a concerted effort to restore silver to its function as money of full power." The delegates of the European States recognized the necessity for maintaining in the world the monetary functions of silver as well as of gold, but held that "the selection for use of one or the other of the two metals, or of both simultaneously, should be governed by the special position of each State or group of States." Finally they declared that "the differences of opinion which have appeared, and the fact that even some of the States which

have the double standard find it impossible to enter into a mutual agreement with regard to the free coinage of silver, exclude the discussion of the adoption of a common ratio between the two metals."

In 1881, when another conference was held, France declared itself in favour of bimetallism, and was followed by the United States, Italy, Austria, the Netherlands, and India. The French delegates stated that the great fluctuations in the value of silver relatively to gold were injurious to trade, and that in their opinion a fixed relation of value between gold and silver would be productive of great benefit to the commerce of the world "A convention entered into by an important group of States, by which they should agree to open their mints to the free and unlimited coinage of both silver and gold at a fixed proportion of weight between the gold and silver contained in the monetary unit of each metal, and with full legal tender faculty to the money thus issued, would cause and maintain a stability in the relative value of the two metals suitable to the interests and requirements of the commerce of the world" It was suggested that the ratio 15½ 1 "would accomplish the principal object with less disturbance in the monetary systems to be affected by it than any other ratio" Belgium, Greece, Switzerland, and Scandinavia declared themselves to be in favour of a gold standard, England and Germany refused to agree to the suggestions put forward, but said that if an agreement was entered into among several of the chief countries they would consider regulations by which the monetary employment of silver might be increased Consequently the conference broke up without arriving at any definite conclusion

In 1886, when the market price of silver had fallen to 3s 6d per ounce, a Royal Commission on the Depression of Trade and Industry suggested an inquiry into the condition of the metals, and, as a result mainly of the great

difficulties caused to the Indian Government by the depreciation of silver, a strong party in England was in favour of bimetallism No unanimity of opinion was secured on the subject, and the Commission reported that "though unable to recommend the adoption of what is commonly known as bimetallism, we desire it to be understood that we are quite alive to the imperfections of standards of value which not only fluctuate, but fluctuate independently of each other, and we do not shut our eyes to the possibility of future arrangements between nations which may reduce these fluctuations. One uniform standard of value for all commercial nations would, no doubt, be a great advantage But we think that any premature and doubtful step might, in addition to its other dangers and inconveniences, prejudice and retard progress to this end"

In the international conference held at Brussels in 1893, summoned on the initiative of the United States, no definite bimetallic aim was put forward as in 1881, and the professed object of the conference was merely to see what measures could be taken "to increase the use of silver in the currency systems of nations" Several schemes were suggested and rejected The French now stated definitely that they would not adopt bimetallism themselves unless other nations would do the same, and the United States was left practically alone in the support of bimetallic principles The failure of the conference gave a serious blow to the cause of bimetallism, and as a question for practical politics it has since been abandoned. The indefinite results of years of international discussion have been briefly summed up by Jevons —"Universal bimetallism is at present, at any rate, impossible to obtain, and a prediction of its effects could only be guesswork; bimetallism, even over a considerable area of the civilized world, has not been tried, and to establish bimetallism in individual countries would mean that these countries were

condemned to constant alternations of the money in use." "Bimetallism," he says, "is a question which does not admit of any precise or simple answer. It is essentially an indeterminate problem."

CHAPTER XIV

THE CURRENCY OF INDIA

INDIA and the East, it has been said, have always acted as the safety valve of the world's currencies, for the habits of hoarding among the people, the absence of methods of economizing the use of coin, and the great demand for the precious metals for purposes of luxury, mean that the East has an almost unlimited capacity for absorbing the precious metals, and is able to carry off the surplus supplies from the West. Macpherson considered that it was this drain of the metals to the East that modified in Europe the effect of the great additions to the stock of metals in the seventeenth century. "The Indian trade," he said, "arose to considerable magnitude at the same time that the American mines began to pour their treasure into Europe, which has happily been preserved by the export of silver to India from being overwhelmed by the inundation of the precious metals, as it must have been had no such exportation taken place." The result of this constant flow of metals to the East was that the balance of trade was always in favour of India; its exports were always greater than its imports, and the balance was made up by the importation of metal.

The currency that the East India Company found in India, when they first formed trade settlements there in the seventeenth century, was mainly silver, and the coin in most general use was the silver rupee, though some gold coins were struck as well, of which the best known

were the mohur in the North and the pagoda in Madras. As early as 1600 Elizabeth coined some "portcullis pieces of eight," very like the Spanish dollar, for use in India, and in 1677 British rupees were struck, but it was not until 1758 that they were coined to any considerable extent No attempt was made to get any uniform system throughout British India before the nineteenth century. In 1806 the Court of Directors, on considering the question of the Indian currency, decided to introduce the silver rupee as "the principal measure and money of account, with a gold rupee coined of like fine weight, and left to find its level according to the usefulness it may possess as a coin" It was not until 1835, however, that a uniform silver monometallic system was adopted for the whole of British India It was declared that "gold coins shall henceforward be a legal tender of payment in any of the territories of the East India Company," and the coin taken as the standard was the rupee of the Madras type, weighing 180 grains, and consisting of 165 grains of fine silver and 15 grains of alloy its value in English money was for a long time approximately 2s

Several attempts were made after this to introduce a gold coinage, but not with any permanent results. In 1841 it was declared by Government proclamation that the gold mohur was to be legal tender and was to be current for 15 rupees, but after the gold discoveries it was feared that at this rate it would be overvalued / Consequently, in 1852 the Government refused to receive gold in payment of accounts due, and, though gold could still be brought to the Mint for coinage by the public, silver could not be demanded in exchange for it A few years later, when it was evident that no great fall in the silver price of gold was to be expected, suggestions for a gold currency were made again Both the Bank of Bengal and the Chamber of Commerce at Calcutta were in favour of it, recommending the introduction of English sovereigns and

half sovereigns, and in 1868 the Government declared that it would be willing to take English gold money at the rate of 10 rupees 4 annas to the sovereign in payment of accounts due, but the acceptance of gold in payment of debts was not made compulsory for the general public in the case of private creditors. Gold mohurs continued to be coined in small quantities until 1891.

The Indian Coinage Act of 1870 was the most comprehensive statute regulating the currency that had yet been drawn up. By it the Indian Mints were opened to the free coinage of silver, subject to a coinage charge of 2 per cent., with an additional charge of 1 per cent. for melting the silver and bringing it to the Indian standard. The rupee and half rupee were declared unlimited legal tender; smaller silver coins—the quarter of the rupee or four annas, and the eighth of the rupee or two annas—legal tender only for the fractions of the rupee, as was the case also with the copper coins—the double pice or half anna, and the pice with its half and third. In 1876 the Government of India was empowered to declare certain coins of the Native States to be legal tender, provided that such coins were of the same weight and fineness as the coins of British India, that they were coined at the British Mints, and that for thirty years the Native State abstained from coining on its own account.

The great difficulties in connexion with the Indian currency towards the end of the nineteenth century arose from two causes—from the depreciation of silver, and from the great increase of the home charges, *i.e.*, of the payments which the Indian Government had to make in England.

The effect of the depreciation of silver was that there was a continuous fall in the value of the rupee estimated in terms of English money. By 1873 it had sunk from 2s. to 1s. 10·35d.; by 1876 to 1s. 9¼d., and later in the year to 1s. 6½d.; by 1892 to 1s. 2·985d., and by 1894 to 1s. 0½d.

The effect of this change on trade was to encourage exports from India and to discourage imports. Traders buying goods in the Indian markets to send to England found that, as a sovereign would now exchange for more rupees than before, they could buy a larger quantity of goods with the same amount of English money ; whilst, on the other hand, English manufacturers sending out goods to India found that, as the natives would only pay the same amount for them in rupees as formerly, and as the rupees were now worth less, reckoned in terms of English money, their profits were considerably reduced. The effect on Indian trade was, however, not likely to be permanent, for, though general prices in India were not at first affected by the fall of silver, yet they would tend to rise eventually, and to rise especially in the case of those articles used for foreign trade. This would result from the excess of exports over imports, which, by causing large quantities of silver to be poured into the country, would eventually tend to raise the general level of prices, and the premium on sending goods from India to England would then disappear. This effect on the balance of trade was to a certain extent counterbalanced by the great increase of the home charges of the Indian Government. For various purposes—to pay home salaries, to buy stores, to pay the interest on loans, etc.—India has to send to England large sums of money annually, and these payments have to be made in gold. At the time of the Mutiny they amounted in all to not more than £5,000,000, but by 1873 they had risen to over £13,000,000, by 1892 to about £16,500,000, and in 1907 to nearly £18,500,000. Consequently the Indian Government suffered very severely from the fall of the rupee, for it received its revenue in silver, and the amount of silver received was no greater than before the depreciation, whilst these greatly increased home charges had to be paid in gold, and hence the quantity of silver required to discharge

them was proportionately very much increased. The actual payment was not made by remittance of specie, but by bills or telegraphic transfers drawn on India by the Secretary of State and sold by him in London for sterling. Thus a merchant who had to remit money to India would find it easier to buy a bill on India in London than to send metal, and consequently every increase in the home charges meant that less money was sent to India, and the exchanges were now much less favourable to India than in earlier days.

It was these difficulties caused by the sudden fall in the market value of silver—the fluctuations of trade, the loss suffered by the Indian Government and by Indian officials, who often had to spend a considerable part of their salaries in England and found that their purchasing power at home was reduced by one-fifth—that led some economists to the opinion that bimetallism, or even the introduction of a single gold standard, was the only possible remedy for the existing financial difficulties. The objections to a single gold standard were so obvious that it was not seriously considered, for the initial expense of obtaining a gold reserve would have been very heavy, and discontent would have been caused by the reduction in value of the innumerable little hoards which had been saved by the people, amounting to about 500,000,000 rupees.

As early as 1878 the Government of India had proposed to close the Mints to the free coinage of silver until the value of the rupee had risen to 2s., but the scheme was unfavourably reported on and was rejected by the Home Government. It was not until 1892, when the gold value of silver had fallen below 3s. 3d. per ounce and the value of the rupee had fallen below 1s. 3d., that the suggestion was brought forward again, and this time it was adopted, not so much with the object of raising the value of the rupee as of preventing any further reduc-

tion, for another heavy fall in the value of silver was anticipated The Act of 1893 closed the Mints to the unrestricted coinage of silver until the value of the rupee had risen to 1s 4d The public could then get rupees from the Mint, but only in exchange for gold coin or bullion at the rate of 15 rupees to the sovereign. Gold in the form of English coin or bullion would always be received at the Mint at this rate, and gold coin was to be accepted at the Treasuries in payment of Government dues The committee who recommended this change were well aware of the risk of tampering with the currency, and recognized that the immediate effect would be to alter the Indian measure of value "As long," they said, "as the Indian Mint is open, the measure of value is the market value of the weight of silver contained in the rupee, but as soon as the Mint is closed we can no longer be sure that this will be the case Further, so soon as the rupee has risen to the given ratio, the fraction of an English gold sovereign represented by 1s 4d will become the measure of value" (Farrer) The Act was not very effectual at first in fixing the exchange value of the rupee, for this was affected by economic conditions as well as by currency legislation, and trade disturbances caused by plague and famine, the extraordinary expenses of Government which prevented remittances being sent to England, the speculation caused by the closing of the Mint, must all be taken into account In 1894 the rupee sank again to 1s. 0½d., but after that it gradually rose, and since 1898 it has been practically stable at the rate of 1s 4d

The Act of 1893 was never intended to be a permanent settlement, but only a step in the direction of the introduction of the gold standard. It was regarded as "the first step in the process contemplated by the Indian Government, and that process will not be complete

until gold is made full legal tender and is received into the Indian currency as freely as gold is received in England, or as silver is now received in India. This may be effected either by the free coinage of gold at the Indian Mints, or by the free reception under arrangement with the Imperial Government of gold sovereigns coined in England or in Australia as legal tender currency of India. When this is done the change will be complete and India will then have a gold standard of value and a gold automatic currency, the quantity of which will depend on the demand for it. . . . . This currency will in the main consist of rupees, each of which is intended to circulate, not at the value of the silver contained in it but at the value of the gold contained in the fraction of the sovereign (1s. 4d.) which it represents. With the exception of the small quantity of gold in actual circulation, the currency of India will thus become a token currency of unparalleled magnitude; and if the market value of silver should fall considerably, its value would become very much greater than the value of the silver contained in it. Under such circumstances it will, to a great extent, resemble a paper currency, and if it were not made exchangeable for gold on demand would resemble in many respects an inconvertible paper currency. The question then arises whether it is certain that such a currency will be maintained at its gold value without further precautions" (Farrer).

In 1899 the gold standard was finally adopted; the English sovereign and half sovereign were made legal tender in India together with the rupee, and in order to maintain the stability of the silver currency and ensure its convertibility into gold if necessary, a fund known as the gold standard reserve has been formed by the Government. For some years after 1893 the coinage of rupees almost ceased, as they were only

coined in exchange for gold and very little gold was brought to the Mint for that purpose. By 1900 it was found that the currency was insufficient to meet the needs of the public, and since that date the Government has purchased silver and has coined the quantity required. As the rupee, rated at 1s 4d, is worth very much more than the silver contained in it, reckoned at the market price of silver, considerable profits are made on the coinage, and these are now used to swell the funds of the gold standard reserve In 1906 a bronze coinage superseded copper and a new subsidiary nickel coin—the one anna piece—was struck

In the early days of the East India Company banking business was quite unregulated, and was carried on mainly by "agency houses" founded by retired civil and military employees of the Company, who made loans to it at a high rate of interest Reckless investments in industrial establishments led to a good many failures among these houses between the years 1828 and 1834, and after that time banks were established on a firmer basis and a sounder system of credit grew up. In 1809 the Bank of Bengal was founded, in 1840 the Bank of Bombay, and in 1842 the Bank of Madras, and these banks in the three great presidency towns were required to keep in their vaults cash to the extent of one fourth of their outstanding liabilities No complaint was made about the way in which they carried on business, but it was thought that the Government might make a profit on the issue of notes, and by the Act of 1861, which adapted the Bank Act of 1844 to the conditions of India, the right of note issue was withdrawn from the banks, and a Government Department in India was made the representative of the issue department of the Bank of England For purposes of note circulation British India was divided into districts known as circles of issue, of which there are now eight.

At one specified place in each circle notes were to be issued on demand in exchange for gold or silver coin or bullion, the notes were to be legal tender in their own circle of issue, but coin could always be demanded in exchange for them at any Government office The limit of note circulation was fixed first at 40,000,000 rupees, and was afterwards extended until in 1905 it had reached 120,000,000 rupees, the notes were issued in denominations at first not under 10 rupees, though now they can be issued in denominations as low as 5 rupees In 1898 the issue of currency notes was authorized on the security of gold deposited in England, and this Act, which was at first temporary, was made permanent in 1902 By the Indian Currency Act of 1905 currency notes for 5 rupees issued in any town in British India were made legal tender throughout the country with the exception of the Province of Burma

CHAPTER XV.

COLONIAL CURRENCIES

In the early days of English colonial history the mother country made no attempt to regulate the currency of the colonies, and though the royal rights of dealing with the coinage were extended to the colonies they were tacitly surrendered by the Crown, and the colonists were allowed to initiate currency legislation, subject only to confirmation by the sovereign in Council. Most of the colonies in the early days of settlement suffered from a great scarcity of coin of any sort, which in many cases forced them to carry on their trade by a system of barter and to take any articles in common use as a medium of exchange and measure of value. Even when coin began to come in, as a result mainly of the growth of trade with other countries, it was for the most part foreign coin, and in the American and West Indian colonies in the seventeenth and eighteenth centuries the Spanish dollar, which was current in the Spanish-American colonies, was almost the only coin known, or at any rate was the coin in most general use, in the English colonies as well. Another result of the scarcity of coin was the early and rapid development of paper money. Banking institutions soon became a very important feature of colonial currency systems, and for the most part the banks and even private individuals were allowed to issue notes without any restriction, though the English Government refused to acknowledge them as legal tender. In many cases these notes

soon became discredited and could not be kept at par with coin, and the question of paper money in the colonies soon threatened to become a serious difficulty, especially after the English had acquired by conquest such colonies as Ceylon, Cape Colony, and British Guiana, which already had depreciated paper currencies. In the early part of the eighteenth century the state of the currency in many of the colonies was so bad that some attempt at regulation was made by the Home Government; but the efforts to regulate the rate at which English money should be received in the colonies and for which colonial money should be exchanged, and to keep some control over paper money, met with very little success. Some difficulty was also experienced in the early part of the nineteenth century from the exportation of Spanish dollars to be used as currency in England, because it caused a scarcity of the current silver specie. To check the outflow, in Trinidad and in New South Wales a piece was cut out of the middle of the coins, stamped with a new milled edge, and allowed to pass current as a coin above its sterling value; hence it was more profitable to bring dollars to the Government to be cut than to export them, and a supply of silver money was kept in these colonies.

In 1825 the Home Government embarked on a new line of policy and tried to introduce English sterling silver coins into general use in the colonies. The reasons for this change were (1) that during the wars between Spain and its colonies trade between the English and Spanish colonies had almost ceased and the supply of Spanish dollars had been consequently cut off, and (2) that the home metallic currency was now on a sound basis, and the Mint was in good working order and would be able to satisfy large demands if necessary. The English Government, if it was able to put the shilling in general circulation in the colonies, would reap the advantage of the seignorage charges and would avoid the expense of

sending specie to the colonies to pay for stores, salaries of officials, etc. An Order in Council was issued in 1825 giving legal currency to English coins in the colonies generally, but it was at first ineffective, because the mistakes were made (1) of rating Spanish dollars for concurrent circulation with English silver and omitting to rate gold coins, and (2) of overrating the dollar by rating it according to the English Mint price of silver—5s. 2d. per ounce—while the market rate was about 2d per ounce lower. Thus in the West Indies British silver was underrated as compared both with Spanish dollars and with gold coins, and consequently could not be kept in circulation until the Orders were modified in 1838 and the dollar allowed to circulate at 4s 2d instead of at 4s 4d

The idea of the universal introduction of English sterling currency in the colonies was abandoned in the second half of the nineteenth century in favour of the principle of currency areas, which recognized the fact that the colonies must, if they are to be commercially prosperous, use a currency similar to that of the adjacent countries Thus Mauritius was recognized as coming with Ceylon within the currency area of India, and consequently the rupee was established there as the standard coin, in 1887 British Honduras was allowed to have as its standard the silver dollar of Guatemala, and its coinage was thus practically assimilated to that of the neighbouring republics.

The colonies which now have the sterling standard are Australasia, South Africa, Fiji, and St Helena, and in these the 40s limit for the legal tender of silver is in force in practice, though it is not legally adopted by all the Australian colonies. The West Indian Islands, British Guiana, the West African colonies, the Falkland Islands, and Malta also have the sterling standard, but without any legal tender limit for silver, except in the case of Malta, where the limit is fixed at £5. The currency of

Canada is assimilated to that of the United States, the American gold eagle and the English sovereign being both legal tender, and since 1894 the gold coins of the United States have been the standard in British Honduras as well. The chief silver coins used as standard are (1) the rupee in India, Ceylon, Mauritius and the Seychelles, East Africa, and Uganda, and (2) the Mexican dollar in Hong Kong, Labuan, and British North Borneo, Hong Kong being allowed since 1864 to coin silver dollars of the Mexican type.

The chief feature in the early currency history of the Australian colonies was the part played in it by the Colonial Government. In New South Wales, which was established first as a convict settlement, the Government was the chief consumer, and fixed from time to time the rates at which it would purchase goods ; thus, as in the early years, when coin was scarce, not only the price of convict labour but of all common articles was fixed in terms of sterling money, barter was facilitated. The scarcity of coin was also met by what was practically an issue of Government paper money, for the real currency in use in the colony was the commissary's "store receipt," given in acknowledgment of supplies furnished and eventually convertible into bills on the London Treasury. As the free settlers increased the need of a coinage was more felt and promissory notes were very common, but the frequency of forgeries and failures made them a very uncertain form of money. There were a few silver and copper coins, the Spanish dollar being most commonly found, and the Government was always ready to receive silver coins at the current legal rate and to give in exchange bills on the Treasury for sterling money payable thirty days after sight. Hence "the assumed standard was sterling, but the metallic currency consisted solely of silver and copper tokens, maintained at an exaggerated price by the extravagant rates at which Government sold

its Treasury bills" (Chalmers). About 1822 a good many Spanish dollars were imported, for Brisbane, one of the Governors of New South Wales, made an attempt to establish the Spanish dollar as the standard coin, but it failed, because here, as elsewhere, there was a difficulty in keeping English silver and dollars in circulation together. The dollar being overrated, traders refused to take it at its rated value of 4s. 4d., and would only accept it at first at 4s. 2d. and afterwards at 4s., with the result that, as it was undervalued at 4s., most of the dollars were exported and only English silver remained.

The effects of the gold discoveries of 1851 on the currency system made themselves felt almost at once. At that time the total circulation in notes and coin of New South Wales did not exceed £300,000, and with the great and sudden increase of population and development of industry caused by the discoveries the need of an expanding currency was felt at once, and a demand was soon made for permission to coin money in the colony. As a result, a branch of the Royal Mint was established at Sydney by order of the Queen in Council, at which unassayed gold or gold in bars or ingots might be exchanged for the current coin of the realm on payment of a fixed charge. Only a gold coinage was provided for, and the coins were to be identical in weight and fineness with the coins issued from the London Mint, though they were to be differently stamped, and they were to be current throughout Australasia, but not in the United Kingdom. To prevent the large importation of English silver coin the legal tender limit of 40s. was introduced, as it was considered necessary to place the coinage on a sound basis, and English and Australian gold coins were the sole legal tender coin allowed. The new Mint began working in 1855; in 1863 the coins issued by it were allowed to be legal tender throughout the Empire, and in 1871 they were of the same design as those struck by the London Mint. In

order to ensure a large proportion of the gold bullion coming to England a charge for coinage at the rate of 3d. per ounce troy was made at the Sydney Mint.

The early currency history of Victoria ran on much the same lines as that of New South Wales. The colony asked that a Mint might be established at Melbourne as early as 1852, but this was at first refused, and Victoria would not until 1857 consent to receive the coins struck at Sydney as legal tender. In 1869 permission was given to the colony to have a Mint of its own as a branch of the Royal Mint, to strike under the control of the Treasury "gold or other coin in accordance with the standard of weight and fineness of the currency of this realm and of the same design," and the Mint was opened in 1872. The following year the Imperial Government was approached on the question of permitting the coinage of silver at Melbourne, as so much of that metal was produced in the colony, but the suggestion was not favourably received.

The chief feature of the currency history of South Australia was the invasion of the coinage prerogative of the sovereign by the striking of the so-called "Adelaide sovereign." The year 1852 was a time of overtrading, and the financial crisis that followed caused a drain of specie, every emigrant taking away his savings in gold for fear of a run on the banks. Confidence was restored by the opening of an assay office by the Colonial Government to assay and stamp gold ingots to serve as a metallic basis for the issue of notes by the bank. This did not mean that the colony struck gold coins of its own, but that it assayed gold and stamped the weight, purity, and value on the ingots; a few months later £1 tokens were stamped instead of ingots. This experiment was brought to an end by a rise in the price of gold-dust, which prevented any more gold being brought to the assay office. In 1899 another branch of the Royal Mint was opened at Perth.

The Australian Mints, besides issuing gold coins in the form of sovereigns and half sovereigns, also issue gold bullion in the form of bars, partly for the use of local manufacturers, partly for export to India. The Sydney and Melbourne Mints issue as well silver and bronze coins which have been struck at the London Mint, and receive light and worn money for recoinage, coining the gold themselves and sending the silver to London.

The Australian banking system was, before 1893, very like that of Scotland, though not as well managed. There was very little regulation, and the Bank Act of Victoria, passed in 1864, was very general in its provisions, requiring no independent audit of bank accounts and imposing no limit on note circulation. An amendment of the law, passed in 1888, required all banks of issue to possess a paid-up capital of at least £125,000, and made notes a first charge on assets in cases of bank failure; but, on the other hand, any incorporated banking company was allowed to advance or lend money "on the security of lands, houses, ships, or pledges of merchandise." Banking facilities were very rapidly extended; soon nearly every little community was supporting branches of all the leading banks, and these banks also established agencies all over the United Kingdom, with the result that a large amount of British capital was sent to Australia, and by 1893 British investments formed a third of the total deposits in the banks.

The financial crisis that followed was caused by economic conditions peculiar to a newly settled country; too much capital had been invested in great enterprises that could not become productive for a long time, speculation in land had been carried beyond the possibilities of immediate development, great public works had been recklessly undertaken on borrowed money, and the public debt had risen to the enormous amount of £34 per head. The Australians had at first made the mistake of treating

the enormous amount of capital that poured into the country as if it were a permanent form of wealth, forgetting that most of it was in the form of a loan, that interest was due on it, and that the whole amount could be withdrawn at the will of the depositors. It was, in fact, the withdrawal of deposits, when it was realized that speculation had been carried to an extreme limit, that was the immediate cause of the collapse of credit in 1893. In January, 1894, the Bank of Melbourne failed, and a few months later the Commercial Bank of Australia, the English and Australian Bank with ninety-one branches, and the London Chartered Bank with fifty-eight branches. Altogether fourteen banks collapsed, their aggregate deposits amounting to £85,000,000, of which £26,000,000 was British capital. Twelve banks survived the crisis and helped to restore confidence, and the Government of New South Wales, as well as issuing temporarily Government notes, made bank-notes a legal tender for six months, thus enabling the banks to come to the help of trade by issuing loans. At the present time the number of banks in Australia and New Zealand is not large, but by means of numerous branches banking facilities are extended throughout the country. Two of the largest banks—the Bank of Australasia and the Union Bank of Australia—have their head offices in London, and four banks hold more than half of the deposits and nearly two-thirds of the coin reserves of the whole body. The Australian bank-note system still suffers from lack of uniformity and lack of regulation, but the advisability of establishing a Commonwealth Bank has already been under discussion.

In Cape Colony, when it first came into the possession of the English in 1806, the standard coin was the silver ducatoon, but there were as well many other foreign coins and a good deal of paper money. By 1825 the currency consisted mainly of depreciated paper, and

the Cape Government then passed an ordinance making British silver and copper coin legal tender throughout the colony. Until recent years there was a great dearth of small silver money, and as late as 1880 it was usual to give only 19s. 6d. in small money in exchange for a sovereign, and copper and bronze coins were almost unknown, as they were not popular with the natives. In 1881 the Coinage Act of 1870 was applied to the whole colony.

The development of banking in South Africa has not been marked, as elsewhere, by great financial disaster. There was little regulation before 1891, when the Cape Government required the withdrawal from the circulation of notes then outstanding and allowed future issues only on condition of the deposit of securities with the Treasurer-General, the only securities accepted being those of the Cape Government. No provision was made for a specific coin reserve, for, as gold was so plentiful, the business of discount and exchange was a much more important part of the work of the banks than that of issuing notes. Two of the most important banks are the Standard Bank of South Africa and the National Bank of South Africa, which has its headquarters at Pretoria.

The standard coin of Canada when it was conquered from the French in 1760 was the French écu, but the currency had for a long time consisted mainly of paper money. The Act of 1825 was not successful in bringing English coins into circulation, and a report issued three years later stated that "the circulating medium of both provinces is paper; British coin is never seen, and, except among the Canadians below Quebec, rarely a silver dollar. Specie cannot swim so near the engrossing gulfs of the American paper circulation." In 1834 the adoption of a gold standard by the United States caused a drain of gold from Canada in that direction, whilst the silver was also drained out of the country in connexion with the ex-

changes. To check the outflow an Act was passed in Upper Canada raising the legal value of the English crown to 6s. and of the English shilling to 1s. 3d., and providing for the rating in terms of English money of the American eagle and the Spanish dollar, but the overvalued shilling drove all other coins out of circulation.

The first currency regulations for the Dominion of Canada were caused by the International Monetary Conference held at Paris in 1867. On the supposition that the gold 25-franc piece would become the standard international coin, and that the United States half-eagle would be adjusted to correspond with it in weight, the Dominion Parliament, holding that it was desirable that the currency of Canada should remain of the same value as that of the United States, provided for the adoption of the basis recommended at the conference, and the English sovereign was to exchange for $5·04⅓. In 1871 the gold coins of the United States were adopted for circulation concurrently with the English sovereign, and since then the metallic currency has been on an entirely gold basis, consisting mainly of eagles or other American gold coins, though English sovereigns are used at Halifax, where there are English troops stationed and an Imperial dockyard. Gold coins, however, though they can always be obtained from a bank, are not now widely used, and their place has been taken almost entirely by Dominion notes and bank-notes. It was in the same year, 1871, that provision was made for striking Canadian token coins in silver and copper or bronze—the silver coins (50 cents, 25 cents, 10 cents) to be legal tender up to $10, bronze or copper to be legal tender up to 50 cents. The gold legal tender coins now in use are the English sovereign, valued at $4·86⅔, and the United States eagle, valued at $10.

The Ottawa Mint Act of 1901 provided for the establish-

ment of a Mint to strike gold coins which were to be legal tender all over the British Empire and silver and copper coins for circulation in Canada only. The Mint, which is a branch of the Royal Mint, was opened in 1908, but as yet it strikes only silver and copper coins.

Newfoundland has always had a separate coinage. By an Act of 1863 a single gold standard was adopted, with the dollar as the unit; but the dollar was only money of account, the actual coin in circulation being the two dollar piece. Legal tender coins are the sovereign and the United States eagle; until 1887 the Spanish doubloon was also legal tender.

The Canadian banking system was founded on the model of the Scotch; the banks framed their own charters, and their policy was directed by common agreement among themselves, with little interference from the central Government. Thus, though they had to contend with the usual difficulties of providing a currency for a new and rapidly growing industrial community, their development was natural and symmetrical, and the early history of banking in Canada is attended with fewer catastrophes than in most other countries. Attempts were made at different times to substitute Government currency for bank-notes, but not successfully, though a good deal of Government paper money is in circulation side by side with bank-notes.

It was in the early part of the nineteenth century that the development of banking became important in Canada. In 1817 a banking company was formed at Montreal, and began business with a capital stock of $250,000 under the name of the Bank of Montreal, without waiting for legal authorization, as a private partnership with unlimited liability of the shareholders. In 1821 charters were granted by the Provincial Legislature of Quebec to the Bank of Montreal, the Quebec Bank, and the Bank of Canada; and about the same time banks were

authorized in Ontario and New Brunswick, and, a little later, in Nova Scotia The charters granted bore a close resemblance to one another, and adhered closely to the Scotch system The banks in Lower Canada were given corporate powers for a term of years, and the principle of limited liability applied to the shareholders They were not allowed to lend money on land or mortgage, but might take such property in payment of debts contracted in the course of legitimate business Except for the fact that the directors were liable for the general indebtedness of the banks, no limits were imposed on the extent of their note circulation—the various banks received and exchanged the notes of their competitors and settled the balance in specie once a week The banks were subject to few restrictions, and there was little legal control over them, but, on the whole, they were established on a sound basis, and the freedom of note issue was a very important factor in the industrial development of the country.

After the union of the two provinces a scheme was brought forward by the Governor-General for the establishment of a provincial bank of issue under the direct authority of the Government, and an attempt was made to introduce into Canada the principles of Peel's Bank Act of 1844, but as there was a very strong feeling against interference with the existing banking system the plan was not adopted, though it was thought that steps should be taken to get some uniform regulation of the banks and to provide safeguards against unsound banking In the middle of the century a mania for speculative banking seized on the people, free banking on securities was increasing, and was encouraged by the repeal of an Act passed in 1837 which had prohibited the issue of notes by unchartered banks Private banks were consequently allowed to issue notes, provided that they deposited provincial securities with the Receiver-General for not less than

$100,000 as a pledge for the convertibility of their note issues. The object of this clause, from the point of view of the Government, was to widen the market for provincial securities and to drive the banks into a secured note system similar to that of the National Banks of the United States. This Act was not very successful, though it was not repealed until 1866, the only bank of importance that flourished under its regulations being the Bank of British North America.

In 1866 another attempt was made to claim for the Government the right of note issue, and a Bill was passed to authorize the issue of Government notes to the extent of $8,000,000, payable on demand at the Government offices in Montreal or Toronto, but legal tender everywhere else. Advantageous conditions were offered to the banks if they would substitute these notes for those issued by themselves, but only the Bank of Montreal was willing to fall in with this suggestion.

The Act creating the Dominion of Canada in 1867 conferred exclusive authority in matters connected with currency, coinage, and banking on the Dominion Parliament. The provincial note issue now became a Dominion issue, and redemption agencies were established in the capitals of each of the four provinces; but again the attempts to create a Government currency were only partially successful. By an Act passed in 1870 the banks were required to keep not less than a third of their reserves in the form of Dominion notes, and the Government assumed the sole right to issue notes for denominations below the value of $4; ten years later the proportion of the reserves to be kept in the form of Dominion notes was raised to 40 per cent., and the banks were allowed to issue no notes below the value of $5.

A thorough revision of the banking system was undertaken in 1890, as it was found impossible under the existing system to keep bank-notes at par all over the

country, and in the more remote districts they were always at a discount. The reforms were made at the suggestion of the leading bankers of Montreal, with the object of securing stability without infringing the freedom of the banking system. To gain security for note issues three steps were taken :—(1) the provision of the Act of 1880, making notes a first lien on assets, was confirmed ; (2) a safety fund, known as the Bank Circulation Redemption Fund, was to be raised by contributions from the banks, to be placed in the custody of the Minister of Finance and set apart for the payment of the notes of banks that had failed; (3) to keep the notes of banks that had failed at par they were to bear interest at the rate of 6 per cent. from the day of suspension to the day named for payment. Elasticity of note issues was maintained, for the Canadian bankers would never agree to the Government proposals for a bond-secured circulation ; but this freedom of note issue has not led to inflation, for, though the banks are allowed to issue notes to the full extent of their capital, their circulation is generally considerably below their legal limit. To keep the notes at par in all parts of the Dominion, redemption agencies are established in a large number of towns in all the provinces, and thus the bank-note circulation has acquired a thoroughly national character. No legal minimum reserve was established, but a large amount of capital was required ; no bank can be opened unless the subscriptions to the capital stock are at least $500,000, half of which has been actually paid up, and the capital of the larger banks much exceeds this amount, that of the largest—the Bank of Montreal—being as much as $14,000,000. The necessity for a large capital limits the number of banks; but as a result the system of branch banking is very widely extended, and by this means Canada is much better supplied with banks in proportion to its population than the United States. In 1900 the

Canadian Bankers' Association, which had been organized in 1892 as a private voluntary association, was incorporated by law and authorized to establish clearing houses and make regulations for their management, to regulate the bank-note issues, to take over the management of suspended banks, etc., subject to the approval of the Treasury Board. The chief advantages gained by the Canadian system are unity of policy on the part of the leading banks, which is especially useful in any time of stringency, uniformity of system and even distribution of banking facilities throughout the country by means of the branch banks, and elasticity of the currency without the dangers of inflation.

In the early part of the nineteenth century the powers that the sovereign could exercise with regard to the regulation of colonial currencies were not clearly understood. It was not realized that English legal tender money was not legal tender in the colonies without special legislation, that statutes passed dealing with the English currency did not include the colonies, and that under his prerogative powers the sovereign could only regulate the currency in those colonies where there did not exist a local Legislature to which the power of regulating the currency had been surrendered by Act of Parliament or by Royal charter. By a clause of the Act of 1870 the sovereign was allowed to issue a proclamation on the advice of the Privy Council making the whole Act or any part of it apply to any part of the Empire with or without modification.

Colonies with responsible government have power to regulate their own currencies by their own Legislatures; in colonies without responsible government the Legislatures can regulate the currency, but subject to the direct control of the Imperial Government, which can act by instructing the Governor to refuse the Royal assent to a Bill, or by disallowing a law to which he has given assent.

In all colonies the power to proceed by proclamation under the Act of 1870 can be exercised.

In 1881 regulations were drawn up defining the conditions on which new silver and bronze coins could be supplied to Colonial Governments from the Royal Mints, and it was declared that the Master of the Mint was to pay the expenses of carriage, the Colonial Governments paying the nominal value of the coin; the Colonial Governments were also ordered to make such arrangements as might be deemed necessary for the withdrawal of worn silver coins from circulation.

The chief authorities consulted for this chapter are Chalmers, "History of Currency in the British Colonies," and Conant, "History of Modern Banks of Issue."

PART II

HISTORY OF MONEY IN THE UNITED STATES

CHAPTER I

FINANCE DURING THE COLONIAL PERIOD

THROUGHOUT the seventeenth century the English colonies in North America were allowed to grow up and develop their social and political institutions with very little interference from the mother country; and, though the right of coinage and of the regulation of the currency were retained, in theory at any rate, as part of the royal prerogative, in practice the colonies were left to struggle unaided with the almost insuperable difficulties of providing a currency for growing communities. Consequently from the first the Colonial Governments assumed the power to bestow legal tender quality upon money and upon substitutes for money, subject only to the dormant authority of the King in Council.

As a result of the extreme scarcity of coin, the colonies for some time after they were founded were forced to carry on their trade by barter, and some article in common use either for domestic purposes or for trade was taken for use as money. The value of these articles was, however, always estimated in terms of English currency, for the colonists had brought with them from England the English standard and English denominations, though there were few or no actual coins to correspond to them.

Tobacco was for a long time used as money both in Maryland and in Virginia, where in 1618 the price was fixed at 3s. per pound for the first quality and 1s. 6d. for the second; but the rapid increase in cultivation caused it

to fall to 6d, and in 1639 to 3d per pound Attempts to restrict cultivation proved ineffectual, and the tobacco riots of 1683, which aimed at a wholesale destruction of the crops in order to keep up the price, were equally unsuccessful, for the real cause of the difficulty was that an article of such uncertain value as tobacco was unsuitable either as a medium of exchange or as a measure of value, and there was little improvement until it was superseded by coin In the New England States "wampum" was the principal medium of exchange for the purposes of ordinary retail trade Wampum was the white or black beads (the black being the more valuable) made from the stems of periwinkle shells, after the shell has been broken off, which were very plentiful on the coasts of the New England States and were commonly used as money by the Indians They began to be used by the colonists about 1627, when contracts were made payable at will in either wampum, silver, or beaver skins in Massachusetts, and in 1637 they were made legal tender at the rate of six white or three black beads a penny for sums under one shilling The price varied in different districts Connecticut in the early days received wampum in payment of taxes at the rate of four beads a penny, but in 1641 it agreed to adopt the same rate of exchange as Massachusetts and to allow wampum to be legal tender at that rate for sums under £10. A good deal of difficulty arose from the large quantity of bad and imperfect beads in circulation, and in 1649 an order was issued in Massachusetts that the beads "should be entire, without breaches, both the white and the black without deforming spotts," and that they should be properly strung into eight parcels—the white beads into parcels of the value of 1d, 3d., 1s, and 5s respectively, the black into parcels of the value of 2d, 6d, 2s 6d, and 10s The same year the use of wampum for the payment of rates and taxes was forbidden, but it remained legal tender for

all other purposes until 1661, and continued to be used for small transactions until a much later date. Beaver skins were also used as money at the rate of about 10s. per pound, but, unlike wampum, which was used for no purpose except currency, they had intrinsic value in themselves which was recognized in Europe, and so beaver skins were used for export rather than for purposes of internal trade.

Farm produce was another form of currency, and one in which taxes were frequently levied, and, as far as was possible, the Colonial Governments controlled the prices of commodities and voted from year to year the rates at which various grains and other produce would be received in payment of public dues. For larger sums cattle were often used, but the finest animals were not brought in for this purpose, and the struggle against lean cattle was a standing difficulty for the tax collectors. A varied assortment of produce was collected at the Government offices, and not infrequently the Treasury had to be relieved of redundant merchandise by selling it at a loss when the market price fell below the Government rates. Produce pay only went out gradually; for a long time salaries were paid partly in coin and partly in merchandise, and it was not until 1670 that Massachusetts repealed the law that made coin and cattle the equivalent of money. Many other commodities were used as money in the different colonies; Rhode Island, for instance, constituted wool at the rate of 1s. per pound a standard of value for assessing rates in 1674; the Assembly of South Carolina as late as 1720 made rice legal tender for the payment of taxes, whilst sugar, rum, molasses, indigo, and skins were all placed under contribution at different times and localities for currency purposes.

A little coin came in gradually by way of trade, or was brought in by immigrants, and for some time the system of barter and the use of money went on side by side.

Ogilby, writing of Maryland in 1671, said: "The general traffick and commerce there is chiefly by barter—exchange of one commodity for another; yet there wants not, besides English and other foreign coins, some of his lordship's own coins." Of the Virginian colonists it was said: "Tobacco is their meat, drink, clothing, money, not but that they have both Spanish and English money pretty plenty, which serves only for pocket expenses, not for trade, tobacco being the standard of that, as well with the Planters and others as with the Merchants."

The reason for this scarcity of coin was partly that the colonies in their infancy required commodities from England, as for a long time their industries were solely agricultural, and for manufactured goods they were almost entirely dependent on the mother country, sending in exchange tobacco and other produce or any money they could get hold of. On the other hand, perhaps because European coinage was of very uncertain value, very little effort seems to have been made to obtain a satisfactory currency, and the want of it was considered by some writers to have retarded the development of their trade. Bronson in his work on "Connecticut Currency" (quoted by Walker) said:—"The attempt of our forefathers to get along without the currency of the Old World was unwise and unprofitable. The unwieldy and inconvenient substitutes they adopted were practically expensive, costing more, there is reason to believe, than good, hard money. . . . They were poor indeed; their surplus earnings were small, but they had a surplus nevertheless; hence their need of money. They had all along a trade (quite limited for the first few years) with England, Manhadoes (New York), and the West Indies. At first they shipped peltry, fish, and lumber, and afterwards pipe-staves, hoops, beef, pork, peas, fat cattle, horses, etc., and brought back manufactured goods, sugar, molasses, cotton, wool, bills of exchange, silver, and

rum. They would have brought more silver and less rum and other merchandise had the first been in greater request at home. . . . Had the colonists withheld opposing legislation and rejected substitutes, commerce would have supplied them with all the coin they needed (which was but little) in spite of themselves."

The small amount of coin that was in circulation during this time was mainly foreign, and was obtained from the Spanish colonists, who bought English colonial forest produce, sending silver for it in exchange. These coins, though foreign, were always rated in terms of English currency for the purpose of trade with the mother country, a practice which caused a good deal of confusion and complication in later years; for purposes of internal trade pounds, dollars, and shillings seem to have been used indiscriminately in reckoning payments. The Spanish-American dollar, known as the "piece of eight," was the coin in most general use, and its sterling value was 4s. 6d., but, partly from its resemblance to the English crown, it was often rated at 5s.

Towards the end of the seventeenth century clipping was very prevalent, and the coinage became much depreciated. This depreciation was not, as in England, carried on entirely in the interests of the money-dealers, but was in some cases due to Government policy, for in the colonies, as elsewhere, the exportation of coin was likely to become a difficulty, and it was soon found out that a depreciated coinage was much less likely to be melted down and exported than a full-weight currency. In Connecticut, for instance, the colonists tried to keep their coin in the country by declaring its current legal value superior to the mint value at the place of coinage. Moreover, in the eighteenth century, while the colonial standard of value was silver, the real standard in England, as a result of the overrating of gold coins relatively to silver, was gold. Consequently payment by tale, at the English rates

of exchange for the piece of eight, involved a loss to the colonies on the remittance of these coins to England—a difficulty which was easily overcome by reducing the weight of the coins until they corresponded with the ratio of silver to gold that prevailed in Europe As the colonies developed and the necessity for coin—especially for small change—increased, there was a tendency to cut up coins into halves and quarters, and, as a result of the inconvenience of barter and of the uncertainty of the value of light and counterfeit money, the New England States in 1652 began to mint money for themselves "of good silver, of the just alloy of new sterling English money" This coinage is generally known as the "Pine tree Coinage," because, in order to lessen the chance of clipping, the design was altered, the form of a pine-tree was engraved on one side, and a row of dots or letters was placed round the edge of the other In 1686 an Order in Council refused to allow the re-establishment of the New England Mint, but authorized the Governor, Sir Edward Andros, "by proclamation to regulate pieces of eight and other foreign coins within the said territory of New England to such current values as he shall judge most requisite for His Majesty's service and the trade of his subjects there" Pennsylvania also at the end of the seventeenth century wanted to have its own mint, and asked permission to melt down Spanish money to convert it into English coin Penn complained, in answer to an inquiry made by the Board of Trade and Plantations, that as they sent so few exports to England there was a danger of the whole of their coinage being drained away to pay for their imports, which, by decreasing the volume of the colonial trade, would in the long run do harm to England as well as to the colonies This suggestion for a colonial mint, however, was not favourably regarded by the Home Government.

The use of paper money had been known in the

colonies for some time; the scarcity of coin had caused it to be generally accepted among the people, whilst notes had occasionally been used by the Colonial Governments in order to avoid the necessity for taxation. There were at first no legal restrictions of any sort on the issue of notes, and from the middle of the seventeenth century we hear of banks in Massachusetts, though the term at that time merely meant an issue of paper money, and bank-notes were only bills issued by private persons or by the Colonial Governments, but they passed easily into general circulation, and paper money soon became popular, even though it was not easily or rapidly convertible into specie. In 1686, when the Colonial Government of Massachusetts granted a charter to a private bank that had been in existence since 1681, it gave as its reason for this step "the great decay of trade, obstructions to manufactures and commerce in this country and multiplicity of debts and suits thereupon, principally occasioned by the present scarcity of coin." In 1690, when financial difficulties had been temporarily increased by the failure of Phipps's expedition to Canada, which had cost Massachusetts £50,000, the General Court of the colony issued, for the first time, Government bills of credit to the value of £7,000 in denominations between 5s. and £5, again giving as its reason "the present poverty and calamities of this country, and through scarcity of money, the want of an adequate measure of commerce." In 1692 these bills were made legal tender for all payments, and, as a bonus of 5 per cent. was given on them when they were paid into the public treasury, they remained at par with coin for about thirty years. Paper money continued to be issued from time to time in anticipation of the taxes both in Massachusetts and in other colonies as well, though not to any great extent, and as a result of these issues coin showed a tendency to disappear. Specie, however, was not entirely driven out, and in 1694 Massachusetts was

able to collect £675 in pine-tree coins to send to London; three years later laws were passed to prevent the export of specie, and no one was allowed to take more than £5 abroad for necessary expenses.

It was the increasing financial difficulties in the colonies, caused by the fact that their rapidly developing trade and industries were hampered by a totally inadequate currency, that caused the Board of Trade and Plantations to consider the subject seriously, and in the eighteenth century the right of the sovereign to regulate colonial currency as well as English currency, subject only to the supremacy of Parliament, was realized and enforced. It was decided, however, that an Act of the colonial Legislature, which had received the sanction of the sovereign in Council, had all the authority of an Act of Parliament, and could not be revoked by proclamation. The steps now taken by the Government were, not to allow the colonists to strike their own coins or to provide them with English coin, but to regulate the rate in terms of English money at which the foreign coins should pass current. A proclamation of 1704 fixed the minimum rating of the piece of eight at 6s., and directed that other silver coins in circulation should be rated in proportion; but great difficulty was experienced in enforcing it, and coins continued to be received at the older and higher rate, notwithstanding the fact that an Act had been passed imposing penalties on non-observance of the proclamation. As only silver coins were mentioned in the Act the West Indies rated gold coins independently, according to their real value, instead of continuing to treat them merely as multiples of the dollar, and so they passed gradually from a silver to a gold standard, while the North American Colonies, where paper money was already in circulation, issued large quantities of notes, which soon drove coin out of the country.

Thus after this date the use of paper money rapidly increased, and soon threatened to become a serious

difficulty. No adequate provision for redemption was made, but when they were thoroughly discredited notes would be redeemed at a small percentage of their nominal value and new issues would be made, and as a result people were everywhere beginning to lose faith in paper currencies. Notes, though they were only legal tender in the colony that issued them, were generally current in other colonies as well; and between the years 1712 and 1749 there was in practice a single paper currency throughout New England, subject to a more or less uniform rate of depreciation, and practically irredeemable. As a result of excessive paper issues prices began to rise. The accounts kept by a colonial clergyman show to what an extent the evil had gone; goods, he said, that could be purchased forty years earlier for £1 10s. 10d., in 1747 cost £15 2s. 6d. in paper money; wheat had risen from 5s. to 21s.; Indian corn from 3s. to 20s.; beef from 2½d. to 1s. 6d. per pound; shoes from 5s. to 60s., etc. The depreciation was most rapid in Rhode Island, where the ounce of silver, that was formerly valued at 8s., rose in 1715 to 12s., and in 1739 to 26s.; in Massachusetts bills to the nominal value of 16s. would not exchange for more than 5s. in coin, and for a time the colony was forced to go back to produce payments. In the Southern colonies the same movement was going on. South Carolina in 1712 issued bills of credit in order to float a loan, and the practice of borrowing, once started, spread very rapidly. Depreciation very soon began, and great distress and demoralization were caused as these discredited notes were forced on creditors in payment of old debts; attempts made by law to keep paper money at par were, as usual, quite ineffectual. In 1727 tobacco notes were issued. These notes were certificates of the deposit of tobacco in Government warehouses; they were issued by official inspectors and declared current by law, and as they represented actual produce they did not depreciate.

The condition of the currency in the colonies at length became so bad that the English Government was obliged to take steps to regulate it, for complaints about bills of credit were constantly being made by English merchants, who found that their profits suffered from the uncertain character of colonial money. Consequently in 1751 an Act was passed by Parliament to prohibit paper money being made legal tender in the colonies, but it applied to the New England Colonies only, and exceptions were allowed in cases of emergency and war. Already a change for the better had been made in Massachusetts, for in 1749, as compensation for the expenses incurred in the capture of Louisburg, England had sent over 653,000 ounces of silver and 10 tons of copper on condition that the bills of credit of the Colonial Government should be redeemed, and henceforth Massachusetts was on a specie basis. But the change at first caused some alarm, for the people doubted whether the silver would stay in the country, and, if the paper money was reduced in quantity as well, they feared that they might be left without a currency at all. The effects feared, however, were not realized, and after 1751 there was a stable paper currency throughout the New England States, though the volume of metallic money was still small. In 1764 the Act of 1751 was made more stringent, and was applied to the southern and central colonies as well, because their paper currencies had become unmanageable at the time of the Seven Years' War.

In the eighteenth century various experiments were made in banking in the colonies, but they were not very successful. The first attempt, made in 1714, to establish a bank which should be something more than a mere issue of notes, was "a projection for erecting a Bank of Credit in Boston, New England, founded on land security." The sum of £300,000 was subscribed, every subscriber agreeing "to settle and make over real estates

to the value of his respective subscription to the trustees of the partnership or bank, to be and remain as a fund or security for such bills as shall be emitted therefrom." This scheme was popular with the general public, but it was not looked upon favourably by the General Court, and it failed for the same reason that all Land Banks failed—that land is not always easily or quickly convertible into specie. In Connecticut the "New London Society United for Trade and Commerce" was formed in 1732, and asked to be allowed to issue bills of credit as currency, but the petition was not granted. Some years later a charter was granted to the New London Company, but without the power to issue bills. The Company, however, began to issue bills and put them in circulation by buying goods of persons who were willing to take them; and, though there was no promise of redemption, they were eagerly accepted for trade purposes until they were suppressed by the Colonial Government on the ground of illegality. In 1735, when a bank was established in New Hampshire, an Act was passed by the Massachusetts Legislature prohibiting the circulation of its notes within the colony, but this Act was disallowed by the Board of Trade in England on the ground that, as the notes were not legal tender, no one was forced to take them; hence the right of private persons to issue notes, provided that they were not legal tender, was established by law. The decision was reversed, however, in 1741, when the provisions of the Bubble Act of 1721 were extended to the American Colonies. This Act had been passed to prevent the transaction of business by joint-stock companies without special statutory authority. The object of this step was to overthrow the Land Bank which had been started in Massachusetts in 1740; but it was unnecessary, as the Land Bank had been established on an unpractical basis, and was bound to fail in any case. This

interference of the Home Government in currency questions and its attempts to regulate paper issues caused a great deal of indignation in the colonies, and was one of the causes that led to the outbreak of the War of Independence.

CHAPTER II

FINANCE DURING THE AMERICAN WAR OF INDEPENDENCE

THE great problem that harassed Congress all through the War of Independence was the provision of supplies, the difficulty being caused not so much by the poverty of the country, for the colonies were fairly prosperous, as by the weakness of the central authority; for the right of Congress to levy direct taxation was not recognized in practice, and there was no effective means by which the money of the people could be drawn into the national coffers. Yet Congress from its position was forced to incur serious financial responsibility, and it has sometimes been blamed for not making greater efforts to get money by taxation, but it is very doubtful whether any such efforts would have been effectual. The States were fighting England on a question of taxation, they recognized in practice the right only of their colonial Legislatures to raise money from them, and it would probably have been found impossible to collect a continental tax even if Congress had had the temerity to impose it. Congress, however, confined itself to recommending the individual colonies to levy taxes, and for its own part issued paper money, which it looked to the colonies to redeem by means of these taxes.

Yet, even for the colonial Legislatures, whose right to tax was undoubted, the question of raising money was very difficult; for in the northern colonies especially, where the population was very scattered, the little homesteads

and villages were almost self-sufficing, and, coming very little into contact with the Government, they were not inclined to contribute much money for its support. Hitherto they had been very little taxed, and with the outbreak of war taxation, instead of being increased, almost stopped; for as the immediate cause of the contest was a question of taxation, the States with revolutionary Legislatures did not venture to take any taxes at all at first. In 1775 the Provincial Council of New Jersey levied a tax, but so many people refused to pay, that orders were issued to collect it by distraint, whilst between 1775 and 1779 the three southern colonies suspended taxation altogether. A protest made in 1779 against a tax in some districts of Rhode Island which, as a result of the damage caused by war, claimed exemption from the payment of their full quota, is a fair statement of the views generally held about taxation:—"In order to support the Government taxation is necessary. He that receives support ought to contribute to the support of his protectors. Taxation or contributions for the support of the Government ought to be free and voluntary and equal upon every part which receives protection agreeably to the abilities of the individuals or towns at large which receive benefit thereby."

If taxation for the State Legislatures was difficult, for Congress it was clearly impossible, and to meet the exigencies of war the issue of paper money seemed to be the only course open to the Government. Moreover, it was a financial expedient that met with the approval of the people, at any rate at the beginning of the war, for, though the colonies were not poor, coin was scarce and the whole quantity of specie in the country did not amount to more than $12,000,000. For this reason most of the individual colonies were driven by the exigencies of the war to issue paper money on

their own account Massachusetts, which had been on a specie basis since 1749, issued bills to the extent of £26,000 to pay for the soldiers raised in May, 1775, and Rhode Island and other States soon followed her example.

The leaders of the continental Congress were not blind to the dangers of paper issues, and Franklin suggested that the notes should bear interest in order to prevent depreciation, but this suggestion was not adopted In May, 1775, Congress decided to issue bills to an amount not exceeding two millions of Spanish dollars, and in July, when bills were issued to the value of another million dollars, an Act was passed for the regulation of the paper currency No terms of redemption were definitely fixed, but the notes were said to be issued "on the faith of the colonies"—that is, the colonies were to be responsible for the redemption of the bills, which were apportioned among them in proportion to their population, each colony paying its quota in four annual instalments To get the money for this purpose taxes were to be levied, payable either in the bills issued by Congress or in coin, if paid in coin the money was to be used to buy up the bills in circulation, which were then to be cancelled and destroyed Thus these notes cannot be described as either bonds or currency, they were known, in the language of the time, as "anticipations," for they were simply issued in anticipation of taxes that were to be raised in the immediate future, and, as soon as the tax was collected, it was expected that the notes would automatically disappear from circulation and the way would be cleared for another note issue if the need for it was felt Hence the idea that the notes might be used as currency and might become depreciated was not entertained at all, "the paper currency," it was held by the financial committee of Congress, "will be a new bond of union to the

associated colonies, and every inhabitant thereof will be bound in interest to endeavour that ways and means be fallen upon for the sinking of it." As a matter of fact these expectations were disappointed. The notes did not disappear and they very soon became used as currency; moreover, as fresh issues were constantly made by Congress and as there was as well in circulation a great deal of paper money issued by the individual colonies, depreciation very soon began. In May, 1776, when the case of Andrew Gautier, who had refused to receive the notes in payment for goods, came before Congress, it was shown incidentally that 8s. in paper money was not worth more than 6s. in coin, and by December, 1776, a silver dollar in Philadelphia was worth two dollars in paper.

The financial difficulties that followed were increased by the refusal of the authorities to recognize that the continental paper money (*i.e.*, paper money issued by the authority of Congress) was depreciated at all, and there was a general idea that it was unpatriotic to refuse to accept it at its nominal value. Though it was not within its powers to make the bills legal tender, Congress suggested in 1777 that the States might do so; consequently in most of the colonies laws were passed to that effect, and henceforth those who refused to receive the bills at their nominal value were punished as enemies of the country with forfeiture of goods and imprisonment. As these laws had little effect, for many people refused to sell goods at all except for gold or silver, attempts were made to force the circulation of notes at their nominal value by the regulation of prices, but these were equally unsuccessful. The regulation of prices was considered to be the work of the Colonial Governments and not of Congress, and in December, 1776, a price convention met at Providence, formed of delegates from four of the New England States. The convention attributed

the prevailing high prices to avarice, and condemned the high rates of wages that were general on the ground that they made the soldiers discontented with their pay; they recommended that there should be no further issues of paper money on the ground that the quantity of paper in circulation was so great that its nominal value greatly exceeded the value at the former prices of the quantity of transferable property. A maximum price tariff was drawn up for the New England States for such things as were required for the army and navy, and heavy penalties were inflicted on persons who sold goods above the price fixed. In New Jersey, for instance, a man was fined £6 and costs for selling salt at a higher price in paper money than in specie; a man convicted of selling shoes above the tariff was fined £6 in addition to forfeiting 18s., the price of the shoes; another was fined £12 for the double offence of selling flour above the tariff and discriminating between paper and specie. Those who could not pay were sent to gaol. The regulation of prices was never popular, and a reaction against it soon set in. In June, 1777, John Elliott wrote from Boston: "We are all starving here since this plaguey addition to the Regulating Bill. People will not bring in provisions and we cannot procure the common necessaries of life. What we shall do I know not." It was found impossible to enforce the price tariff rigidly, and it was soon discontinued.

There were some, at any rate, of the American statesmen who understood the real cause of the difficulty. John Adams, for instance, refused to believe that any of the remedies proposed for depreciation would be effective, and declared that the only possible means of checking it was to stop the issue of paper money and to levy taxes. In November, 1777, Congress admitted that the depreciation was due to the excessive amount of paper money in circulation, and recommended the States to make no more

fresh issues, though in an address to the people two years later it said that depreciation was partly, at any rate, "owing to the artifices of men who have hastened to enrich themselves by monopolizing the necessaries of life, and the misconduct of inferior officers employed in the public service." Among the public generally there was an opinion that the rise of prices was due to the evil practices of monopolizers and extortioners, and there was also a confused idea, held even by a man in so prominent a position as Franklin, that depreciation acted as a tax, the burden of which fell on the individual in proportion to the length of time that he kept the paper money in his hands. "This currency, as we manage it," he said, "is a wonderful machine. It performs its office when we issue it; it pays and clothes troops and provides victuals and ammunition, and when we are obliged to issue a quantity excessive it pays itself off by depreciation." It was certainly true that the burden fell on the community, but it fell very unfairly, and in such a way as to ruin trade and to strike a blow at the general prosperity of the country. Congress did not recognize the gravity of the situation, and still thought it would be possible to redeem the notes eventually without difficulty. It drew a distinction between natural and artificial depreciation, explaining that natural depreciation was depreciation in proportion to the excess of the quantity of paper money in circulation over the amount needed for currency purposes, and that any depreciation beyond this was artificial and arose from uncertainty as to the ability and willingness of the Government to redeem their bills. Of this, however, there seemed to be little real danger, provided that they were successful in the war, as the resources of the country were not diminished. "Let it also be remembered," they said, "that paper money is the only kind of money which cannot 'make unto itself wings and fly away.' It remains with us and it will not forsake us. It is always

ready and at hand for the purpose of commerce or taxes, and every industrious man can find it."

With these views current as to the nature and function of paper money it was not surprising that fresh issues were constantly appearing. In 1776 the total issues for the year were $19,000,000, in 1777, $13,000,000, and in 1778, $63,500,000. Depreciation increased in proportion until even the Government was forced to give up the pretence that notes were on a par with coin, and the ratio that paper money was to bear to coin was at the end of the year officially fixed at 100 : 13½; the following year it fell to 100 : 3½, and it was admitted that the value of a paper dollar was not more than 5 cents in coin. By September, 1779, the nominal value of the Government bills in circulation amounted to $160,000,000, and though Congress promised that the total amount should not rise above $200,000,000 this promise was not kept. As a result the value of the paper dollar had fallen by December to 2½ cents. Prices rose enormously: in Boston in 1779 a pair of shoes cost $100, flour was selling at from £90 to £100 per cwt., beef at 22s. 6d. per pound, salt at 75 cents per bushel, rum at £25 per gallon, sugar at £150 or £200 per cwt. Landlords found that the effect of the depreciation of the currency was practically to transfer their estates to their tenants, for the rent of 4,000 acres was not sufficient to pay for twenty barrels of corn.

The scarcity of specie was an increasing difficulty. Attempts were made to get money by loans, but unsuccessfully, as the rate of interest offered by the Government was 4 per cent., whilst the market rate was 6 per cent.; only a small sum could be gained by State taxation, and the financial condition of the country grew steadily worse. The French alliance afforded some temporary relief, for it raised the faith of the people in Government credit, as France was willing to pay the

interest on the money borrowed in America by Congress, and it also made it easier to borrow money from foreign countries. The question of foreign loans was complicated by the action of the individual States, which were trying to borrow money abroad on their own account, often offering higher rates of interest than Congress. Franklin, the American envoy at the Court of Versailles, complained that not only had three separate States made application to the French Government for loans, but that they had also expected his assistance in negotiating them. In 1779, when Lee tried to borrow money for Virginia in Holland, the Dutch bankers wanted to be definitely informed how far any particular State was authorized to borrow on its own security, and there was a general idea in Europe that application for loans ought to come from Congress only.

In spite of the efforts made to obtain money, the difficulty of getting supplies for the troops was so great that in 1778 Congress recommended the States to authorize their commissioners to seize all goods required for the use of the armies, giving certificates as vouchers for the quantity and quality of the supplies taken with the prices affixed. In November, 1780, goods to the value of $6,000,000 were apportioned as a tax among the States according to a very elaborate scheme. They were to be collected and deposited at the risk of the States at such places within the State as the Commander-in-Chief should appoint. The result, however, was very unsatisfactory, for the tax was very burdensome to the people, whilst it afforded little or no relief to the army. The difficulty of collecting and distributing a produce-tax is always very great, and is a severe strain even on a capable administration; but in America, where a central administration could hardly be said to exist at all, the task was an impossible one. Consequently the goods, collected very irregularly and with great trouble, were wasted and destroyed, and, from the difficulty of getting labour and transport with in-

adequate money, supplies very seldom reached the soldiers for whom they were intended. In Virginia, for example, large quantities of flour were collected and wasted; the State agent reported that seventy-two barrels of flour had been sent to Westham, but as there was no one to receive it, the soldiers had left it on the river bank without getting a receipt. In September he was sending some more, which he expected would be left in the same way. On another occasion, when urgent demands for food for starving troops were made, the officers were informed that there was plenty of meat and flour left over from the year before, but that it was nearly all spoiled. At New Glasgow large supplies of corn were so carelessly stored that they were almost consumed by pigeons and rats; and after the surrender of Yorktown, cattle, which had been sent in for the use of the army too late to be of any use, were dying in large numbers because no one would provide for them without pay. In 1782 Washington wrote to the President of Pennsylvania:—"A great proportion of the specific articles have been wasted after the people have furnished them, and the transportation alone of wheat that has reached the army has, in numberless instances, cost more than the value of the articles themselves." Specific supplies were, in fact, proved to be burdensome to the people and useless to the Government, and were soon discontinued.

By 1780 trade had returned to a state of barter, as it was impossible to estimate values in the currency then in circulation; Congress could get no revenue at all, and finally it abandoned all hope of ever paying off the notes and was forced to admit that the Government was bankrupt. A resolution was passed to the effect that "all notes now due from the United States which have been liquidated in specie value, and all debts payable in specie value, shall be paid in specie or its equivalent at the current exchange between specie and other currency"—a declaration that

there was no chance of exchanging the notes for anything more than their value in specie; at the same time the States were recommended to amend their legal tender laws, so that the notes should be legal tender only at their value in gold and silver. There was great consternation among those who had all through maintained their faith in Congress, and especially among those Frenchmen who had engaged in commercial transactions with America. John Adams, in a letter to Vergennes, tried to defend the Government by throwing the blame of the depreciation, and consequently of the repudiation of Government obligations, on the people who had demanded more paper money for goods and labour than they were worth in coin, and who had thus nefariously frustrated the efforts of Government to keep paper money at a par with coin. Hence he held that the refusal of Government to redeem the notes at their nominal value was neither a violation of the public faith nor an act of bankruptcy, though he acknowledged that "the inconvenience ought to fall wholly on the inhabitants of the States who reap with it the advantage obtained by the measure."

The distress caused by the measure was not as great as might have been expected, for, though the Government was bankrupt, the country was not poverty-stricken; wages were high, material prosperity was increasing, and, though the Treasury was empty, there was a fair amount of specie in the country.

As a matter of fact, the burden of the war had not fallen very heavily on the nation as a whole, and the military demands made on the people had certainly been less than in the Seven Years' War. In different localities there had been at times actual scarcity. In 1779 in Boston, for instance, which was largely dependent on necessaries brought in from outside, we are told—"The miseries of famine are now mingled with the horrors of war. The poor people in the almshouse have been destitute of grain

and other necessaries these many days. Many respectable families are almost starving." And again in October of the same year a minister wrote—"I doubt whether Egypt during the seven years of famine was in greater distress than this unhappy town. We can procure nothing for money. Barter is the only method of commerce which now prevails. You will therefore readily believe that the circumstances of such as have neither salt, sugar, etc., beggars all description." In other parts of the country there was no appearance of distress—in New Hampshire, for instance, where privateering was very general, and was found to be profitable, the war brought increased prosperity. In 1780, Joseph Reed wrote to Washington:—"In my opinion we have miscalculated the abilities of the country and entirely the disposition of the people to bear taxes to any extent. The country not immediately the seat of either army is richer than when the war began, but the long disuse of taxes and their natural unpalatableness have embarrassed the business exceedingly . . . our country friends find their patriotism abate as their interests are affected by duties or taxes. . . . Pretend what we may, the country is much recovered from the distress of the war, and really has the three great requisites of war—men, provisions, and iron—if not in abundance, in sufficiency for all our wants. Our only difficulty is to draw them forth, and for this, two things are essentially necessary: namely, union among the States generally and particularly."

Writer after writer bears testimony to the fact that the country was prosperous and its resources abundant, but that the weakness of the administration and the want of money made it impossible for the Government to make use of these resources for the public service. The French troops were much better supplied than the American, for they could pay for the supplies they required in specie, and so they obtained command of the market. The

American agents complained that they could get nothing in competition with the French, "for the people will go through thick and thin to get the crowns and louis d'or—and the American army must inevitably suffer." Thus the American troops were starving in the midst of plenty. There was even a marked increase of extravagance in expenditure that roused the indignation of Franklin, who wrote in 1779 to the President of Congress—"The extravagant luxury of our country in the midst of all its distresses is to me amazing—when the difficulties are so great to find remittances to pay for the arms and ammunition necessary for our defence. I am astonished and vexed to find upon inquiry that much the greatest part of the Congress interest bills come to pay for tea, and a great part of the remainder is ordered to be laid out in gewgaws and superfluities."

During the last years of the war the management of finance was in more capable hands, and the newly-made post of Superintendent of Finance was accepted in 1781 by Robert Morris, who had taken an active part in public affairs all through the war, and who inspired general confidence from his uprightness of character and disinterested zeal in the public service, as well as by his undoubted abilities as a financier. The position was one of extreme difficulty, for he was called upon to perform a mass of heterogeneous duties lying quite outside the sphere of the ordinary finance minister. He was authorized by Congress to export goods on account of the United States and to import supplies for the public service, to fit out and employ ships, to undertake the management of the produce taxes, whilst in addition he accepted the office of Agent of Marine in order to save expense to the Federal Government. He was hampered on the one hand by the growing weakness of the authority of the Federal Government, which meant that he was powerless to enforce his regulations and that the recommendations which he sent round

to the State Governments received little or no attention, whilst on the other hand he sometimes met with opposition in the Government. In his double capacity as private merchant and banker and as public official he was often driven to pledge his private credit, which as Government credit was at a low ebb carried more weight than his official position, in payment for goods required for the public service, and incurred unjustly the suspicion that he was using his public office for the advancement of his private fortune. Too much was expected of him, and not sufficient allowance was made for the difficulties of his task. "The almost universal opinion," says Sumner, "seems to have been that he did possess, or ought to possess, a magic art for obtaining resources from nothing." He himself urged the necessity for patience. "Congress will know that the public credit cannot be restored without method, economy, and punctual performance of contracts. Time is necessary for each, and therefore the removal of those liabilities we labour under can be expected from time only." Hitherto there had been no adequate system of accounts; it was impossible to get returns of their contributions from many of the States, and members of Congress were too much afraid of losing their popularity to bring any pressure to bear on their own States. Morris brought more regularity into the system. In order to reduce the amount to be paid in interest he wanted to have all outstanding debts funded, and to supply the urgent need for money he tried to raise loans and to place the financial system of the country on the sure basis of adequate taxation.

In 1783, Morris, finding the difficulties of his position were overwhelming, resigned, and his place was taken by Alexander Hamilton, whom he had recommended to Washington as the one man in the country capable of dealing with the war debt, the most serious problem that

confronted Congress. The total cost from the outbreak of war was reckoned by Jefferson at $140,000,000. "Congress, before the formation of the Confederacy, had emitted paper money to the amount of $200,000,000, which at the time of its emission might, as he thought, have had the value of 36,000,000 of silver dollars; the value of the masses of paper emitted by the several States at various stages of the war he estimated at $36,000,000 more. This estimate of the value of paper money rests in part upon conjecture, and the materials for collecting it with accuracy, especially as it regarded the issues of the States, are wanting. The remaining cost of the war, or $68,000,000, with the exception of about one and a half millions, paid on requisition by the several States, existed on January 1, 1784, in the form of debts in Europe to the amount of nearly $8,000,000, of debts due to the several classes of domestic creditors, and of debts due to States for advance on the common account" (Bancroft). In dealing with these various forms of indebtedness, Hamilton assumed, of course, full responsibility for the foreign debt: with regard to domestic debts, he determined in the case of Government contracts to pay the full value of the debts, although in many cases the Government certificates were presented by persons who had bought them from the original creditor far below their real value at a time when the Federal credit was low. He also declared that the Government ought to assume that part of the debt of the several States which had been incurred for carrying on the war. This was a question of political expediency. The assumption of State debts roused a great deal of opposition at the time, and the wisdom of the policy has always remained an open question. The question of funding the debt also gave rise to a great deal of controversy, but Hamilton considered it the only possible course. In an address to the electors of New York in 1801, he gave a vigorous

defence of the system :—"It is nothing more nor less than the pledging of adequate funds or revenue for paying the interest and for the gradual redemption of the principal of that very debt which was the sacred price of independence. What have been the effects of this system? An extension of commerce and manufactures, the rapid growth of our cities and towns, the consequent prosperity of agriculture, and the advancement of the farming interest. All this was effected by giving life and activity to a capital in the public obligation which was before dead, and by converting it into a powerful instrument of mercantile and other industrial enterprise."

The question of the redemption of the continental currency was considered in 1783, but no action was taken until 1790, when redemption was provided for at the ratio of 100 : 1, if the notes were presented before September 30, 1791, and this time-limit was gradually extended until the end of the year 1797. Continental paper continued to circulate in Virginia and North Carolina after it had disappeared from the Northern States, and there the depreciation was as much as 1,000 : 1. According to estimates made in 1786 the total issues of continental notes had amounted to $241,562,775, and had by that time been reduced to $130,127,419; the legitimate State issues were estimated at another $200,000,000, but, as they were very largely counterfeited, the amount of paper actually in circulation was much greater. The country soon recovered from the disorganization of trade and industry caused by the war, but it has been generally recognized that the bad moral effects of this experience of depreciated currency were more lasting. "The loss which America has sustained from the pestilent effect of paper money on the necessary confidence between man and man, on the necessary confidence in the public councils, on the industry and morals of the people, and on the character of republican government, constitutes

an enormous debt against the States charged with this ill-advised measure" (Madison).

As soon as the war was over, it was necessary to take measures to bring order into the finances. Coin had been fairly plentiful in the country during the later years of the war, for trade still continued with England in spite of laws to the contrary and the general idea that it was treasonable, the English army in America was supported by goods exported and sold in defiance of restrictions, and a good deal of both French and English money was spent in the country, the French money in circulation amounting in 1782 to 35,000,000 livres, or £1,500,000. The question of the American coinage and of the foreign exchanges was extremely complicated. It will be remembered that the coin most generally used in America was the Spanish dollar, though values were generally estimated in terms of English money, which was the recognized money of account, and there was also a good deal of foreign coin in the country. The dollar was variously rated in different States, passing in Georgia for 5s., in North Carolina and New York for 8s., in Virginia and New England for 6s., and in other States for 7s. 6d. In 1782 dollars were rapidly going out of the country and there was a great scarcity of silver coinage, its place being taken by light-weight gold coins; a large quantity of these were Portuguese moidores, which were sent out from England and found their way all over America, where they circulated in all sorts of mutilated forms. Coins of all denominations were cut up by the general public into halves, quarters, and eighths, a practice that gave rise to an enormous amount of fraud, and clipping was so great an evil that the Chamber of Commerce ordered all coins to pass by weight only.

With the coinage in this state the exchanges were in the utmost confusion; in the exchanges with France, for instance, the dollar had to be converted into livres and

sous, and the various ratings of the coin made this a task of great difficulty. The currency in which the transactions of the war had been mainly carried on was that of Pennsylvania, where the dollar was rated at 7s. 6d. and where a penny was consequently $\frac{1}{90}$ of a dollar. As the equivalent of the livre in English money was 1s. $4\frac{2}{3}$d., the dollar rated at 7s. 6d. exchanged for 5 livres 8 sous, and it was at this rate that the foreign debt was converted into dollars in 1783; yet Morris, during his administration of the Treasury, had sold bills of exchange at rates varying from 5s. 3d. to 7s. 6d. for 5 livres, notwithstanding the fact that the metallic par for this sum was 6s. $11\frac{3}{4}$d.

All through the war the need for a common unit into which all the varying currencies could be converted was very strongly felt. As early as 1776 Congress had appointed a committee to examine the various gold and silver coins in circulation and ascertain their value and the proportion that they ought to bear to the Spanish milled dollar, and the Articles of Confederation, drawn up in 1778, conferred on Congress the sole right of dealing with the coinage:—"The United States in Congress assembled shall also have the sole and exclusive right and power of regulating the alloy and value of the coin struck by their own authority and by that of the respective States." As a preliminary step to a definite settlement, Morris had prepared for Congress a table of rates at which foreign coins should be accepted at the Treasury, and at the same time had pointed out the urgent necessity for uniformity on the one hand and for a legal tender law on the other, and these resolutions were adopted by Congress in 1785. The question of a Federal mint had already been under discussion, and in 1781 another report was made, and it was suggested that there should be a mint charge sufficient to make a difference of 2 per cent. between coin and bullion. For the coinage it was suggested (1) that the decimal system

should be adopted; (2) that the unit should be the silver dollar containing 375·64 grains of pure metal, and that the half dollar, double dime ($\$\frac{1}{5}$), and dime ($\$\frac{1}{10}$) should also be struck in silver; (3) that the eagle (\$10) containing 246·268 grains of pure metal, and the half eagle should be struck in gold and should be legal tender equally with the dollar; (4) that the copper coin should be the cent, and that 2¼ pounds of copper should be coined into 100 cents; (5) that the standard of fineness for both gold and silver should be eleven-twelfths. This Act never became fully operative, only the copper coins being struck because of the pressing need of small change, and it was superseded by the Coinage Act of 1792.

The incorporation of the first national bank was another result of the exigencies of the war, for the idea had arisen that such an institution might be used as a means of financial aid to the Government. In 1780 a subscription was opened in Pennsylvania to provide the Government with money in order to enable it to supply some of the most pressing needs of the soldiers, and the subscribers, though demanding securities for repayment, were willing to advance the money without interest. Congress sanctioned the scheme, and the subscribers were formed into a bank known as the Bank of Pennsylvania; the "faith of the colonies" was pledged to them, and guarantees for repayment within six months were given. Thus this bank, which was opened in July, 1780, was in its origin "nothing more than a patriotic subscription of continental money . . . for the purpose of purchasing provisions for a starving army" (Morris); it had power to issue notes, but its notes soon lost credit, and in 1784 it was closed.

In May, 1781, the establishment of a national bank on a sounder basis was proposed by Morris, and it was hoped that a bank with a paid-up capital on a specie basis would become "a principal pillar of American credit, so as to

obtain the money of individuals for the benefit of the Union, and thereby bind those individuals more strongly to the general cause by the ties of private interest." The majority of the States voted in favour of the scheme, and the bank was incorporated by charter, but before the end of the year the question was raised whether the Confederation was authorized to incorporate a bank. To conciliate public opinion, the corporation was forbidden to exercise any powers in a State repugnant to the laws and constitution of the State, but its position was so uncertain that it thought it advisable to apply for a charter to the Government of Pennsylvania as well, and thus it obtained State authorization, which at that time counted for more than Federal sanction. The capital stock of the bank was to consist of $400,000, and was thrown open to public subscription, but the money did not flow in at all readily, and it was only in consequence of a loan from Europe, which enabled the Government to subscribe $250,000, that it was possible to open the bank in January, 1782, under the name of the Bank of North America. It had the right to issue notes which were to be received by the Federal Government in payment of duties and taxes, but which were not to be legal tender otherwise, and were to be payable at the bank in specie on demand; they circulated at par in Philadelphia, but could not command public confidence at a distance. As well as issuing notes, the bank made advances to the Government and to private individuals and discounted commercial paper, and it became so prosperous after the war that it was able to pay dividends at the rate of 14 per cent. per annum. Undoubtedly it did good service by providing a sound paper currency, and the revival of credit and confidence after the war was partially due to it, but nevertheless it did not give general satisfaction, and before long complaints of favouritism, extortion, and harsh treatment of debtors were brought against it, and a committee of

inquiry was appointed by the Legislature. It was quite clear that the charges were brought on political and social, rather than on financial grounds, but as a result of the inquiry the bank lost the charter which had been granted to it by the Government of Pennsylvania, on the ground that it was "not compatible with public safety and that equality which ought to prevail between individuals of a republic." Thus until it obtained another charter, this time from Delaware, it had to fall back on the authority that it derived from the Federal Government; in 1787 a new charter was granted it by Pennsylvania as well, and it continued in existence as one of the most prominent banks in the Northern States, the only other banks of importance being the Banks of New York and of Boston.

CHAPTER III

HISTORY OF MONEY BETWEEN THE WAR OF INDEPENDENCE AND THE OUTBREAK OF THE CIVIL WAR

Part I.—*The Metallic Currency*

The Constitution drawn up in 1789 declared that the right of dealing with the coinage lay with the Federal Government:—"The Congress . . . shall have power . . . to borrow money on the credit of the United States; to coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures; to provide for the punishment of counterfeiting the securities and current coin of the United States." At the same time it was decided that "no State shall coin money nor emit bills of credit; nor make anything but gold and silver coin a tender in payment of debts," thus definitely stating that the function of dealing with the currency was a monopoly of the Federal Government, though whether even the Federal Government should have the right to issue paper money with legal tender power was left uncertain.

There was urgent need as soon as the War of Independence was over of establishing a uniform currency, and two Acts were passed—an Act establishing a Federal Mint in 1791 and the following year a Coinage Act, giving full legal tender power to both gold and silver coins at the ratio of 1 : 15, the standard of fineness for both metals being, as before, eleven-twelfths. For the most part the suggestions made in 1786 were carried out, except that

no gold dollars were struck. The monetary unit was to be the dollar; the silver dollar was to contain $371\frac{1}{4}$ grains of pure silver, which was to be the equivalent of 24·75 grains of pure gold; thus the ratio adopted between gold and silver was 1 : 15. The coins agreed on were the eagle ($10), with its half and quarter in gold; the dollar with its half and quarter, and the dime ($\$\frac{1}{10}$) and half dime in silver; the weight of all these coins was regulated by that of the dollar and they were all full legal tender. The cent ($\$\frac{1}{100}$) and the half cent were struck in copper. The decimal system was adopted, and Congress ordered the dollar to be divided into a hundred parts which should be used as money of account, but this was not put into actual practice until after the Civil War, the value of merchandise before that time being quoted in dollars, shillings and sixpences. The coinage of both gold and silver was to be free and unlimited, except that a charge of half of 1 per cent. was to be made if the depositor preferred to have payment for the bullion at once instead of waiting for it to be coined; later Acts provided for a charge to be made on bullion deposits that were either above or below the Mint standard of fineness, which was eleven-twelfths for both gold and silver, as these deposits could not be coined without the expense of melting and recasting.

This attempt to establish bimetallism by law was not successful, because the difficulty of keeping the two metals in circulation together on an equal footing was found now, as it always had been, to be insuperable. In a very short time the silver dollars showed a tendency to disappear, for, as they were a little lighter than full weight Spanish dollars, though of the same nominal value, and were freely accepted by tale all over the West Indies, they were exported in large quantities to the Spanish colonies. Spanish dollars, on the other hand, were brought to the United States Mint for recoinage, as coinage was free

and there was a profit of 1 per cent. to be gained on the dollar by the transaction, with the result that the Mint was kept constantly at work for the benefit of the exchangers, and the country reaped none of the benefit of the good money that it issued, the only coins in use being worn and light weight Spanish piastres and dollars and their fractions. The only remedy attempted was to stop the coinage of dollars altogether, and in 1806 an Act was passed to this effect, which remained in force for thirty years. The difficulty arose mainly from the fact that gold was rated far below its market value relatively to silver. By 1797 the market ratio between gold and silver was 1 : 15·47, and the rise in the value of gold was further stimulated by the French coinage law of 1803, which adopted 1 : 15½ as the ratio between the metals, and by the adoption of the single gold standard by England in 1816. As the Mint ratio between the metals in the United States was still 1 : 15 it was much more profitable to export gold than to use it at home, and by 1834 silver commanded a premium of over 4½ per cent. One result of this scarcity of both gold and silver coin in the United States was that foreign coins were allowed to remain in circulation with legal tender power. In 1793 it had been decided that foreign coins might remain in use at a certain valuation established by law for three years longer, but were then to be brought to the Mint for recoinage, only the Spanish dollar and its fractions retaining legal tender quality. This Act, however, could not be carried out, as the United States currency was quite insufficient for the needs of the country; the time-limit was constantly extended, and it was not until 1857 that foreign coins entirely disappeared from circulation.

The export of specie went on extensively between the years 1820 and 1830, French silver coins forming the main part of the circulation. Various remedies were suggested, and among them the old one of prohibiting by law

the exportation of specie, but this was discarded as not expedient, for history had proved that it was always impossible to enforce it. It was recognized by some that the large quantities of bank-notes of small denominations helped to drive out specie, and all agreed that gold was undervalued, but there was a difference of opinion about the ratio that should be adopted and about the advisability of maintaining the double standard. At length the Act of 1834 was passed, which, by raising the value of gold relatively to silver, was intended to bring gold back into circulation again, but it was carried through hurriedly and without sufficient regard for the commercial ratio between the metals, and it overshot the mark. Thus, though it had been acknowledged shortly before that the ratio of 1 : 15.625 was "the utmost limit to which the value of gold could be raised," the ratio adopted was 1 : 16, by which gold was now overvalued. The weight of the gold coins was altered and the gold dollar was reduced from 24.78 grains to 23.2 grains of pure metal, the standard of fineness being reduced about 2 per cent at the same time; in 1837 the weight of the gold dollar was raised to 23.22 grains of pure metal, where it remains at the present day. As a result of the overvaluation of gold the country was gradually denuded of its silver coins; the silver dollars had already disappeared from circulation and the smaller silver coins were now driven out, their place being taken by the light weight coins of Spain and Mexico. Between the years 1834 and 1836 the money in circulation was mainly foreign, and merchants found it necessary to keep coin chart manuals to determine the value of the various coins that passed through their hands. In 1837 a free and unlimited coinage of silver dollars was resumed, but as they were exported as soon as they issued from the Mint the Act had little practical effect on the currency.

The effects of the legal overvaluation of gold were

increased by the gold discoveries of the middle of the century, which, by making gold cheaper, increased the divergence between the Mint and the market ratios of the metals, as well as causing temporary and local currency complications. When the discoveries began, in 1848, the currency in California consisted mainly of Spanish coins, and for a time gold-dust became the medium of exchange, the pinch of gold-dust—about the same quantity as a pinch of snuff—being a generally recognized measure where means of accurate weighing were not available. Very soon private coinage of gold began, and, though some alarm was felt at first, it was found to be such a convenience that no steps were taken to check it. Several establishments were set up for assaying and coining gold, and, though only one of the various types struck conformed exactly to the Government standard of weight and fineness, all the rest circulated freely and were received on deposit by the banking houses In 1851 the Government set up an assay office and began to stamp octagonal pieces of gold of the value of $50, known as "slugs," and in 1854 a Government Mint was opened in San Francisco, but it was not until 1864 that private coinage was prohibited, and it was estimated that private coins were struck during this period to the value of $50,000,000.

The gold discoveries greatly increased the amount of gold specie in the country, and the market value of silver relatively to gold was rising, the premium on silver dollars between 1853 and 1861 being as high as 4 per cent or 5 per cent It was, consequently, impossible to keep them in circulation, but the Subsidiary Coinage Act, passed in 1853, was successful in preventing the exportation of the smaller silver coins. By this Act, though the Government was authorized to buy silver bullion for coinage at its discretion, the Mint was closed to the unlimited coinage of the smaller silver coins on private account. At the same time the weight was altered, the weight of the

half dollar being reduced from 206¼ grains to 192 grains, and that of the smaller coins in proportion, whilst all silver coins below the value of the dollar were to be legal tender only to the extent of $5. The result was that these coins now stayed in the country, as their bullion value was below the point which made export profitable, and the country was soon adequately supplied with small coin. It was now for the first time possible to get rid of the depreciated foreign coins, and in 1857 they were declared by law to be no longer legal tender; they were received at Government offices at one-fifth of their nominal value, and soon disappeared from circulation. At the same time a change was made in the copper coins; nickel was now used, and, as a mixture of nickel and copper was more valuable than copper alone, the weight of the cent was reduced from 168 grains to 72 grains, and the coinage of half cents ceased.

PART II.—*Paper Money and Banking*

One of the first financial schemes of Hamilton, Secretary of the Treasury, after the Constitution was drawn up, was the establishment of a central bank, which would help the Government by enabling it to get loans easily in sudden emergencies, and would be an advantage to the country by extending the credit system and by facilitating the circulation of the currency. No special permission had been given to Congress by the Constitution to incorporate a bank, but it was held that it was implied in the clause which allowed Congress to exercise any powers necessary for carrying out the specific rights granted, and by a liberal interpretation of this clause the establishment of the United States Bank was held to be within the limits of the Constitution.

As a result of this decision the First United States Bank

was incorporated by charter. It was not a State-owned institution, but Government was a large shareholder, for, although it was thought at this time that the Government ought not to issue paper money, either directly or through a bank, yet it was considered quite legitimate for it to be a partner in a bank, provided the management was in the hands of private owners. The capital of the Bank was to consist of 25,000 shares of $400 each. Four-fifths of these shares were thrown open to public subscription, the whole amount being subscribed before the books had been opened for two hours ; and in order to help the Government to float its loans the shares had to be paid one-fourth in gold or silver and three-fourths in Government stock. The remaining five thousand shares could be subscribed by the United States Government, which might pay for them in bonds instead of in money, and was allowed to extend payment over a term of ten years. In all matters that concerned the Bank the shareholders might have one vote for every share that they held up to the number of thirty ; but to safeguard the interests of the smaller shareholders no one might have more than thirty votes, whilst in order to keep out foreign influence, for at least two-thirds of the shares were held abroad, no voting by proxy was allowed. No special authority for note issue was given in the charter, because it was not thought necessary, as at this time the right of note issue was held to be the essential part of the work of every bank ; the notes were to be receivable in all payments made to the Government, but were not to be legal tender and were to be payable on demand in coin. The Bank was to be under the supervision of the Secretary of the Treasury, who was allowed to deposit public funds in it at his discretion, and was to receive weekly reports of its business. It was granted a monopoly for twenty years, and the establishment of branch banks was authorized.

The Government from the first took full advantage of

the financial assistance that such an institution afforded, and borrowed money freely in anticipation of the taxes, these loans were, however, not promptly repaid, and by 1795 the debt of the Government to the Bank amounted to over $6,000,000 By 1802 the Government had sold out its shares, realizing on the sale a profit of nearly 57 per cent on its investments The Bank was an advantage to the country as well as to the Government, for by refusing to receive the notes of non-specie paying banks it helped to regulate the currency, by forcing redemption of notes in specie at its discretion it checked the excessive note issues of the State banks, and its own note issues were never very large compared with its specie reserve, thus it was a steadying influence in the currency system

In 1809 the question of the renewal of the Bank charter was brought forward, and with it the question of increasing the capital of the Bank, mainly with the idea of giving further financial support to the Government, as war with England was impending It was suggested that the new charter should be granted subject to the condition that the Bank undertook to lend three-fifths of its capital to Government if necessary, and to pay interest on all Government deposits over $3,000,000 The benefit that the country had derived from the Bank was so undeniable that, if the question had been dealt with at once, there is little doubt but that the new charter would have been granted, but the matter was postponed, and the delay gave time for difficulties to be raised by its enemies In the first place the State banks wanted to free themselves from the competition of a great central State-supported bank, and to secure Government deposits for themselves, and the Bank, from the strictness with which its rules were enforced and the severity with which it treated reckless and fraudulent financial banking institutions, was very unpopular with a considerable part of the

business community. In the second place the Bank fell a victim to political and party interests. It had been established by the Federalists, and now the Republicans, for party reasons, denounced it as an aristocratic institution under foreign influence—an unjust complaint, as foreign shareholders had been practically excluded from any share in the management, whilst foreign capital had come into the country to pay for the shares they held. Moreover, if the charter were not renewed, the expense of paying off all these shareholders at the same time would be very considerable, as the shares were now at a premium. The result of the delay was that partly owing to the influence of the Republican party, partly owing to the pressure that the State banks brought to bear on their local representatives, the renewal of the charter was refused, and the Bank was put into liquidation, the shareholders being paid off at the rate of $434 for every $400 share.

One result of the fall of the Bank of the United States was a large increase in the number of State banks. In 1784 there were only three of any importance—the Bank of North America and the Banks of Massachusetts and of New York—and these had an aggregate capital of $2,100,000. The Bank of Massachusetts had been granted a charter by the State Government in 1784, and issued notes upon general assets; it was not until 1792 that any restrictions were imposed on its note circulation, and its note issues were large in proportion to its capital, but did not become depreciated. The Bank of New York opened about the same time as the Bank of Massachusetts, but did not obtain a charter from the State Legislature until 1791. There was, however, nothing illegal in opening a banking business without a charter, and it made little difference, except that the shareholders had unlimited liability for the debts of the bank.

The number of smaller banks had been steadily in-

creasing in the early years of the nineteenth century, and, though charters had been granted more often than not as rewards for service to a political party, and there had been very little effective supervision over the work of the banks, the note issues had not been excessive before 1811. After that date, however, as a result, in part at any rate, of the disappearance of the Bank of the United States, serious abuses arose. The absence of any adequate legal restriction at a time when a large number of new banks were springing into existence resulted in a great inflation of note issues, and the mass of notes of small denominations thrown on the circulation were soon depreciated to the extent of twenty or twenty-five per cent. The opening of a banking business became a favourite form of speculation, the shareholders generally subscribing the capital in the form of promises to pay instead of in specie, which meant that they had little to lose if the bank failed and the chance of making considerable profits if the bank happened to survive. State banks at this time were organized mainly for the purpose of issuing notes, which were their principal means of making loans and discounts, and they exerted political influence with the object of getting deposits from the State Government, because in that case State control over them was generally reduced to a minimum. It was to these unstable banks that the Government had to turn to borrow money to carry on the war with England that broke out in 1812, and they proved to be quite unequal to the strain. By 1814 most of them were obliged to suspend specie payments, but they continued to flood the country with discredited and depreciated notes, which were issued for denominations as low as 6 cents. The suspension of specie payments by the banks involved suspension by the Treasury as well, because the Government money was kept mainly in these banks. Since 1812 there had been five separate issues of Treasury notes by

the Government—the first that had been issued since 1781. These notes were not intended to become part of the circulating medium, and were not legal tender; but as they were receivable for all public dues they circulated freely, and until the suspension of specie payments they were generally at par.

The effect of suspension on the banking system was to cause several more banks to be opened. The State of Kentucky, for example, during a single session of the Legislature in the winter of 1817–18, granted charters to no fewer than forty new banks, whose notes were to be redeemable, not in coin, but in notes of the Bank of Kentucky, of which half the stock was the property of the State Government. As a result specie disappeared and prices rapidly rose; and when, in 1819, the Bank of Kentucky was forced to suspend payment, the Legislature intervened to help the debtors by passing a law to suspend sales of property under execution for debt and by founding the Bank of the Commonwealth, which was empowered to issue notes for $3,000,000. "This was an interesting organization. It had no shareholders, no capital. The officers were elected by the Legislature and their salaries were paid by the State. The notes were to be issued and loaned on mortgage and apportioned among the counties. As a part of the general scheme of relief, a debtor was to have two years in which to redeem under an execution, unless the creditor would endorse on the note that he would take the notes of the Bank of the Commonwealth if offered in payment" (Wildman, "Money Inflations in the United States"). General Adair, in a message to the Kentucky Legislature the following year, allowed that this policy was justifiable only by the "paramount law of necessity," but claimed that it had been successful in restoring confidence. In North Carolina, in 1819, three of the chief banks—one of which was a State bank—made an agreement among

themselves to refuse specie payments, with the result that their notes were soon at a discount of 15 per cent.; a little later they introduced a clause into the promissory notes which they discounted requiring payment in specie, and made use of the coin thus gained to buy up their own notes in circulation at a discount. Yet, when an investigation made in 1828 led to the disclosure that the State bank had less than $1,000 in specie in its vaults, and it was suggested that the bank charters should be cancelled, the banks, notwithstanding the exposure of their business methods, still controlled the situation, and when they threatened to call in their loans the people and Legislature were alike paralysed.

It was the chaotic condition of the banking system, coupled with the financial difficulties of these years of war, when Government had even been forced to suspend for some years the payment of the interest on the national debt, that led to the formation of the second Bank of the United States This bank was opened in 1817 with the object not only of helping the Government, but of providing the country with a good and stable paper currency and hastening the resumption of specie payments Its charter was very similar to that of the first bank The Government was again a shareholder—it subscribed one-fifth of the stock, and appointed five out of the twenty-five directors Instead of making a loan to Government, the Bank paid a bonus of $1,500,000, and was to act gratuitously as fiscal agent of the Government, transferring the public funds at its own expense to any place within the United States where payments were to be made The Treasurer might deposit public funds in the Bank, but could, if he thought it advisable, place them elsewhere on giving reasons to Congress; this option was given because money might be needed at a place where no branch of the Bank had been established, but use was made of it later for a very different purpose.

One very important clause in the charter bound the Bank to pay not only its notes but its deposits in specie, for at that time, though it was recognized that a bank ought to pay its notes in specie, it was thought permissible for it to pay its deposits in the notes of other banks, provided only that the notes it used were those of specie-paying institutions. As the notes of the banks of other cities and States were generally at a discount, because, on the score of distance, they were more difficult to redeem, this meant that in any particular place there were two sorts of bank-notes current—those of the local banks that were generally at par, and those of distant banks that were generally at a discount; this practice was not stopped, but it was prevented in the case of the Bank of the United States. Some attempt was made at regulating the note issues; all notes for denominations under $100 were to be payable to bearer on demand, and suspension of specie payment was prohibited under penalty of a heavy fine. The notes were not legal tender, but they were to be received in all payments made to the United States. The establishment of branch banks was authorized, and the charter was granted for twenty years.

The early days of the history of the Bank were unpropitious. In the first place, the shares thrown open to public subscription were not well taken up. It had been provided in the charter that private subscribers should pay for their shares partly in specie and partly in Government stock, but as very little pressure was put on them to make them pay in specie and the only penalty for not doing so was forfeiture of dividends, less than $2,000,000 came in in specie instead of the $7,000,000 that had been expected, while as long as the Bank redeemed its own notes it was impossible to prevent the withdrawal of specie which had already been paid in. Moreover, a smaller proportion of the subscriptions were paid in Government stock than had been expected, for, as the notes of local

banks were accepted in lieu of specie, it was cheaper to pay shares in them than in Government securities, and as Government securities were rising in value the proportion of the shares paid in them decreased as time went on. As a result of this failure to insist on payment in reliable currency, many of the shares fell into the hands of speculators.

The resumption of specie payments, which it had been hoped would speedily take place, was found to be a work of considerable difficulty. Congress had declared in April, 1816, that after February 20, 1817, all payments to the United States were to be made in specie, Treasury notes, notes of the United States Bank, or the notes of local banks payable on demand. The banks declared that this date was too early, and they were allowed to postpone resumption until July 1st, but meanwhile the United States Bank had to make payments to the Government in specie, and, as it could not obtain specie itself from the local banks before July 1st, it found itself in a difficult position. Moreover, at this time coin was rather scarce, for the large importations from England after the close of the war had had the effect of turning the balance of trade against the United States, and the money brought to the Bank was soon withdrawn and sent out of the country. In these circumstances the Bank ought to have acted cautiously, for a contraction of loans and of the bank-note circulation was necessary to enable a general resumption to be brought about; but instead of exercising caution it made loans and discounted freely, and treated the temporary expansion of trade that followed the war as if it were the sign of permanent commercial advance.

It had been expected that the establishment of the Bank would result in the provision of a stable currency, but the measures taken at first to bring this about were not effective and showed a failure to grasp the principles underlying a sound note currency. The notes issued at

any of the branch banks could be presented for redemption, not only at the branch that issued them, but at any other branch; consequently, as discounting was carried on somewhat recklessly and without due regard for the conditions of trade, and as the Bank encouraged its branches to circulate their notes as far as possible, an impossible situation was soon created. In the trade between the Western and Northern States the balance of trade was constantly against the West; the West consequently had to make heavy payments to the North, discharging its liabilities largely with notes of the United States Bank, and the Northern branches found that they were unable to cope with the large mass of notes presented to them for redemption. In 1818 the system broke down, and after a thorough investigation it was decided that in future no branch should take the notes of other branches except in payments due to the United States. This did something to lessen the difficulty, but in 1819 the note issues of Southern and Western branches were still very great, and the branches were now ordered not to issue notes when the exchange was against them.

Yet when these initial difficulties had been overcome the influence of the Bank was seen to be beneficial. Between 1816 and 1819 the local bank-note circulation had decreased from $110,000,000 to $45,000,000, and, though the contraction due to resumption was no doubt partly responsible for this, the United States Bank had had considerable influence in the reduction and improvement of the note circulation. It could reject the notes of banks which it considered unsatisfactory and demand specie redemption, and its own notes, as they were readily accepted all over the country, provided a reliable and uniform currency, which was bound to have a good effect in raising the tone of the local circulation. By 1829 the currency was acknowledged to be "as sound as could be expected under any system of paper money." "The

evidence is conclusive that the Bank was . . . a strong institution, a valuable auxiliary to the Government, a bulwark against rotten bank-note issues, a most serviceable instrument to the trade of the country, and in its international relations a protection to American industry and commerce" (Hepburn). Notwithstanding its undoubted services to the financial system, and hence to the industrial life of the country, this Bank, like the former one, roused the jealousy of the State banking institutions and was destined to fall a victim to party politics. The hostility of the State banks was easily accounted for. It certainly made efforts to drive the notes of the State banks out of circulation, its contraction of discounts roused discontent, and several of the States imposed a tax on the branch bank within their border or on its note circulation; but the branches refused to pay the tax, and it was declared to be unconstitutional by the Supreme Court. The most general complaint made by the local banks was that the Bank of the United States accumulated their notes and presented them for redemption all at once, draining their reserves of specie and hampering them in their business; in South Carolina especially there were complaints that the "Monster" was draining the South of specie and was making a definite attempt to ruin the people.

As a matter of fact, the people demanded heavy loans from the Bank, and when, as a result of trade depression, they were unable to repay them and mortgages were foreclosed, the Bank came into possession of a good deal of property and land, and was blamed for the distress that had been caused in the first instance, not by its own action, but by the recklessness of the people in demanding loans beyond their powers of repayment. Moreover, the improvement of the paper currency which had been brought about involved the fall of a great many of the less reputable State institutions, and by 1828 "there was no local bank left in operation in Kentucky, none in Indiana,

none in Illinois, none in Missouri, and but one in Tennessee, one in Mississippi, and one in Alabama. Branches of the Bank were doing an extensive business in these States, and the condition of the currency was improved, to say the least" (Gouge).

The local jealousies roused might have been overcome if the Bank had not become involved in party politics and had not incurred the hostility of the Democratic organization. Jackson, who represented the spirit of the West, where the Bank was specially unpopular, was distinctly hostile to it, and in his Presidential message to Congress made a direct attack upon it. "Both the constitutionality," he declared, "and the expediency of the law creating this Bank are well questioned by a large portion of our fellow-citizens ; and it must be admitted by all that it has failed in its great end of establishing a uniform and sound currency." Yet the constitutional right of Congress to establish a National Bank had been acknowledged by a decision of the Supreme Court ten years before, and the benefits that the country had derived from it were so obvious that the cause of the Bank was upheld by Congress, and committees of investigation were appointed.

The result was favourable to the Bank. The report represented "that the dispute was not between a national paper currency and a metallic currency, but between a national paper currency and a local paper currency. Since Congress had no constitutional power to forbid the issue of paper money by State banks, local bank-notes would circulate, and it was not worth while to discuss the superior advantages of a specie currency. The question therefore arose : Is it not better to have a stable currency which by virtue of its uniformity of value will prevent local bank-notes from circulating far from the place of issue? And the Committee was convinced that the United States Bank, by its notes, did actually furnish such a circulating medium more satisfactory even than specie.

. . . Again, the Bank was shown to have performed with most scrupulous punctuality its stipulation to transfer free of expense the funds of the Government to any point where they might be wanted" (D. R. Dewey). Yet, notwithstanding this report, the attack on the Bank was continued, and the question was now fought out on party lines. Though the Bank charter did not expire until 1836, a Bill was brought in for its renewal by the political opponents of Jackson as early as 1832, and was passed by Congress but vetoed by the President. The renewal of the charter was one of the questions on which the next Presidential campaign was fought, and the re-election of Jackson involved the fall of the Bank. Various charges were brought against it, which have been summed up as follows: "First, that the Bank exercised an improper influence in politics; second, that some of the banking operations were ill-advised and violations of the charter; third, that the Bank was unconstitutional; and fourth, that it was a monopoly, and thus undemocratic in character" (D. R. Dewey). The evidence brought in support of these charges was not very conclusive. Party intrigues and the jealousies of the local banks were the real reason for the attack, and, as it was found impossible to get the Senate to agree to its destruction, Jackson brought about its ruin indirectly by withdrawing public funds from it and depositing them instead in certain of the State banks, and as the Bank thus lost its chief source of dividends, it was soon in difficulties. On its expiry in 1836 the charter was not renewed, and in order to continue its existence the Bank obtained with some difficulty a charter from the Pennsylvanian Government and became a State bank. Its activities were now much restricted, and its character was soon completely changed; it speculated recklessly, lent large sums of money on insufficient security, and finally closed in 1841, paying its creditors in full, though the shareholders lost everything.

Again the disappearance of the National Bank, which had certainly had a steadying and restraining influence, had disastrous effects on the history of the currency. After 1820 there had been some improvement. Some help had been given in this direction, firstly, by the Treasury, which was exercising more discrimination with regard to the money in which taxes were paid and refusing the notes of banks which were notoriously bad; and, secondly, by the State Governments, who were exercising more supervision over banking institutions, and were in many cases prohibiting the issue of currency by unauthorized persons and corporations. After 1830, however, when it seemed likely that the competition of the United States Bank would soon disappear, the number of State banks rapidly increased, rising between the years 1830 and 1836 from 330 to 788, whilst the note issues increased from $49,000,000 to $149,000,000.

"The mania for banking was such that formal riots occurred at the subscription of stock, and men of pugilistic ability were employed to enter the subscriptions. The fortunate few who could subscribe the whole sold to the rest at an advance. The prospect that a bank could get some Government money given to it intensified the notion already entertained by those who were desperately in debt, that the best way to escape was to join together and make a bank. The Tammany Society being in debt, a plan was proposed for paying the debt by making a bank. When the great fire occurred in New York in 1835, a proposition was made to create a bank as a mode of relieving the sufferers. 'To make a bank,' said Niles, 'is the great panacea for every ill that can befall the people of the United States; and yet it adds not one cent to the capital of the community'" (Sumner, "History of Banking"). The Report of the Commissioners appointed by the State of Michigan in 1838 to inspect the banks is a good illustration of the banking

system of the time. In one district they found plenty of banks, but only one supply of specie as a basis, which was sent round from bank to bank to await the visit of inspection of the Commissioners. The fraud was detected because, as most of the specie was of foreign origin, it was recognizable after it had been inspected on several successive occasions. In examining the books of the Jackson County Bank it was discovered that "the names of all persons and corporations with whom accounts had been opened were written in pencil, the entries in ink. In a few minutes, therefore, the whole face of the business transactions of the Bank could at any time have been completely changed. The Commissioners proceeded to an examination of the specie of the Bank. Gold coin was exhibited loose in a drawer, which, being counted, amounted to the sum of $1,037; about $150 in loose silver was also counted. Beneath the counter of the bank nine boxes were pointed out by the teller as containing $1,000 each. The teller selected one of these boxes and opened it. This was examined, and appeared to be a full box of American half dollars. One of the Commissioners then selected a box, which he opened, and found the same to contain a superficies only of silver, while the remaining portion consisted of lead and tenpenny nails. The Commissioners then proceeded to open the remaining seven boxes. They presented the same contents precisely, with a single exception, in which the substratum was window glass broken into small pieces" (Sumner, "History of Banking"). Yet the bank claimed to possess $20,000 in specie independent of the certificate deposit of $10,000. The only State Bank that was notably successful was that of Indiana, where genuine and effective control was exercised by the Government. Throughout the South and West notes were for the most part irredeemable, and public opinion was strongly opposed to a demand for specie. "Any one

coming from a distance to draw specie from a bank incurred the odium of the community. In such cases the bank was considered justified in paying in the most inconvenient kind of coin and in taking the longest time to count it. In some cases persons who claimed their rights against banks in this way were threatened with tar and feathers" (White).

Unregulated banking encouraged inflation and speculation, which culminated in the crisis of 1837, brought about by a combination of commercial and financial causes. In its commercial aspect the crisis "was one of the results of that discounting of the future in a new country which results in over-speculation and the sinking of capital in unproductive enterprise" (Conant). After 1825 a great deal of foreign capital had been invested in the United States, great public works were recklessly undertaken without an adequate supply of capital, and the sale of public lands offered unique opportunities for speculation. The price of public lands remained at the point which had been fixed many years before—at $1¼ an acre—and speculators who bought lands at this price from the Government could sell them at a considerable profit; hence the great demand for public lands at this time was a sign not so much of advancing civilization as of speculative activity, in which the banking system played a very important part. To this period belong the "wild cat," "red dog," and "coin box" banks, which arose mainly in the West, and were often started for note issues solely, beginning business without any capital beyond the few dollars necessary for printing and issuing a batch of notes, and subject to no restrictions whatever. Thus a bank meant simply an issue of paper money, and men with no other property and with no financial support opened these banks, and either used the notes to buy land themselves or offered them to other speculators who were planning to build cities or carry out other great enterprises. Such a

course was bound to lead to disaster, and in 1837 there was a general suspension of specie payments, and people were driven to use irredeemable bank-notes, as these were in many parts almost the only available forms of currency. Moreover, as since 1832 the public funds had been deposited in these State banks, many of which had suspended payment, Treasury funds were getting low, and Government was forced to issue Treasury notes to meet the deficiencies of revenue. In 1836 Jackson had issued a circular saying that public lands should be paid for only in specie or in notes of specie value, and now it was suggested by Congress that this regulation should apply to the revenue generally, and that the Government should keep its own funds, severing entirely its connexion with the banks. It was argued on the one hand that speculation played too large a part in the business of the banks to make them suitable depositories of public money, and that allowing them to receive Government deposits evidently stimulated inflation of note issues; but on the other hand it was said that to place the money in the Treasury, where it would be used for no productive purpose until it was actually spent by the Government, was a retrograde step and would lead to hoarding and to the withdrawal of money from circulation, often when it was most needed. The Act was passed in 1840, but was repealed the next year, and it was not until 1846 that this system, known as the Sub-Treasury system, was permanently established.

During this period there was a great deal of variety in the banking systems in different parts of the United States, and the banks of the New England States, New York and Pennsylvania, bore a higher character than those of the South and West. In these Northern States various experiments were made with the object of placing banking on a sound basis, the most important being the Suffolk System, the Safety Fund System, and the Free Banking System.

The object of the Suffolk Bank System, established in Massachusetts, was to get prompt and regular redemption of notes, and to prevent sound bank paper in one State being driven out of circulation by the depreciated notes of other States. One of the chief features of speculative banking was that notes were often put into circulation at a distance from their place of issue in order to make redemption slow and difficult, and after the suspension of specie payments in the South and West a large quantity of depreciated paper poured into the New England States, with the result that good bank paper was fast disappearing, for it was either hoarded or brought to the banks for redemption. To prevent this it was suggested that a redemption office should be established to collect the notes of other States and send them home for redemption, and with this object the Suffolk Bank was opened at Boston in 1818. This bank promised to redeem the notes of any of the New England country banks at par, provided that the issuing bank deposited with it a sum of $5,000, in addition to a deposit sufficient to redeem such of their notes as might reach Boston in the ordinary course of trade. The country banks, though alarmed at first, soon saw the advantage of this arrangement; for if they agreed to these terms they could rely upon their notes being received at par at Boston, and they would be called on to redeem them by the Suffolk Bank only at specified times, whilst if they refused they would be obliged to redeem their notes in specie on demand. Thus the Suffolk Bank became the clearing house of the notes of the New England banks in Boston. The system was encouraged by a law passed by the Massachusetts Legislature in 1845, forbidding banks to pay out any notes but their own, and consequently notes which banks received by way of deposits were henceforth sent at once to the Suffolk Bank for redemption. The system was widely extended; by 1857 five hundred banks

had joined it, and, though it was never established by formal law, it succeeded for about thirty years in maintaining the New England bank currency at par with gold.

The Safety Fund System was organized in New York in 1829, for about that time the charters of a good many New York banks expired, and this afforded a favourable opportunity to start a fresh system. Henceforth every bank that received a new charter or had an old charter extended was required to contribute annually to a common fund for the payment of the debts of any banks that failed. If the fund had been applied in the case of bank failures to the redemption of notes in circulation only, it would probably have worked well, but it was made liable in addition for the whole debts of the bank; and thus, though it answered well in quiet times when the demands on it were moderate, it broke down in time of pressure. The panic of 1837 put a severe strain upon it, and it collapsed entirely in 1841–2, when eleven banks failed, their joint liabilities far exceeding the whole amount of the Safety Fund. After this the fund was used only to redeem circulating notes, but the system, though now quite sound, was soon superseded by the Free Banking System.

Until 1838 no bank in New York State had been able to obtain a charter without a special Act of the Legislature, and charters had been granted more often than not as a political favour. The scandals in connexion with party politics gave rise to the Equal Rights Party, or the "Loco Focos," under whose influence the Free Banking Law was passed. By this law any persons or associations of persons might open a banking business, provided that they lodged with the Comptroller, who had supervision over the system, securities in the form of bonds of the United States or of New York State. They were then

entitled to receive notes from the Comptroller in proportion to the value of the securities deposited, and, after signing them, might issue them as money: In case of failure the Comptroller was to sell the securities and was to use the money for the redemption of the notes. As a result of this law a great many new banks sprang up, and this system of issuing notes on securities was soon adopted by other States as well. It answered fairly well in New York, where it was under adequate supervision, but in the Western States this was often lacking; as a result the securities on which the note issues were based were not sufficiently good and in many cases were found to be practically worthless, the result of their sale in cases of failure not producing a sum sufficient to redeem the notes in circulation.

The years between 1837 and 1840 had been, generally speaking, years of speculation and overtrading, but after that the paper currency was established on a more stable and secure basis, and the note circulation bore a fair relation to the amount of specie and to the deposits, though the banks of the West were still defective. It was not until 1857 that there was another serious financial crisis, involving a temporary suspension of cash payments. The cause of the difficulty was mainly the enormous amount of capital locked up in railway investments, which could not be remunerative for a considerable time. The result was that there was a mass of securities on the market which could not be sold either at home or abroad, and a great scarcity of money, which was increased by the withdrawal of specie from ordinary trade channels by the Sub-Treasury system. The scarcity of specie forced the banks to contract their discounts, the notes poured in from the country districts for redemption, bank shares fell in a short time from par to under 40, and suspension of specie payments followed, over 5,100 banks collapsing. This crisis was, however, soon over, for it was the result

of mutual distrust among the banks themselves rather than of failure of confidence on the part of the general public.

Thus, to sum up, throughout the first part of the nineteenth century the banking system had been chaotic, and had developed under so many adverse influences, at the mercy both of political agitators and of commercial speculators, that it is astonishing that the country was able to support such a system without being involved in financial ruin. One of the greatest evils was the influence of party politics in financial matters, for bank charters were granted mainly as a reward for service rendered to the party in power, the State Government was often a shareholder in a bank and was too much interested in the profits to inquire how they were made or to exercise any restraining influence, and in many cases there was a tendency for the banks to control the State Governments. The constitutional position of the State Governments in relation to the banks was uncertain. The Constitution merely forbade them "to emit bills of credit"; and as the right to grant bank charters and to own bank shares was not prohibited they continued to exercise it, and their right to do so was not called in question until after 1820, and then only because they tried to evade by means of banking institutions the prohibition to emit bills of credit. In 1837, however, the decision of the Supreme Court settled the question in favour of the State Governments, and by a narrow definition of bills of credit as bills "issued by the State on the faith of the State and designed to circulate as money," the States were allowed to do indirectly what they could not do directly, and could practically make use of the banks to issue paper currency. Many State Governments were shareholders in banks, and in some cases had exclusive rights of property in them, but generally speaking these State-owned banks were not successful. In Alabama, for in-

stance, the people had such confidence in paper money that they abolished direct taxation, and to defray the expenses of the State merely set aside $100,000 in the notes of the State bank. When a little later these notes became hopelessly depreciated the whole structure of business and credit in the State collapsed. Other States had very similar experiences, and State-ownership was found to be so unsatisfactory that in many newly formed constitutions a clause was inserted forbidding the State Government to own or hold shares in a bank. Another great source of difficulty was the absence of any restraint upon note issues. The issue of notes was looked upon as the most important, and in some cases even as the only essential part of the work of a bank; the notes of the State banks formed a large part of the medium of exchange in private transactions, and it was not until the Sub-Treasury system was established that it was ordered that specie only was to be accepted in payments to the Government.

As a result of the absence of regulation there was an enormous variety of counterfeit notes in circulation—ordinary counterfeits of genuine notes altered to higher denominations, genuine notes of solvent banks with forged signatures, notes of banks which had failed, notes of banks which had never been in existence, etc.; it was estimated that there were in circulation notes of seven thousand different kinds and denominations, of which about four thousand were fraudulent. With so many different issues competing against one another it was almost impossible to discriminate accurately between the good and the bad, and instead of discriminating between currencies the discrimination was generally between districts, some localities bearing a specially bad character. Most notes were at a discount, which varied with the distance from the place of issue, because of the delay, inconvenience, and expense of sending them

back for redemption, and the need for some central place of redemption was keenly felt. Banks were established and started business on very insecure foundations, sometimes without any capital at all, or, as was more usual, with capital subscribed not in specie but in stock notes or promises to pay in the future. As a result of this system suspensions of cash payment were frequent; the years 1814, 1818, 1837, 1841, 1857 were all years of suspension, and at such times the country was thrown back on a currency of depreciated and irredeemable bank-notes as its sole form of circulating medium. These periods of suspension caused comparatively little excitement, business continued in much the same way as before, and even after resumption of cash payments the depreciated notes still continued to circulate. The loss in these times fell mainly on the poorer and more industrious part of the community, who in the absence of any other form of money were bound to accept these notes, however bad they were. Through the greater part of this period, and over the greater part of the States, bank-note issues were not really convertible, but this was due, in part at any rate, to the strong prejudice in favour of paper money with the general public, as well as to the influence of the banks themselves, for by common agreement they never called upon one another to pay their notes in specie, and every bank had on deposit and paid out large quantities of the notes of other banks. At the same time the absence of effective supervision, the lack of legal restrictions and of any authoritative or business traditions, together with a great deal of actual swindling that was carried on with impunity, must be held responsible for the greater part of the abuses that went on. Yet in any case in a new country, where all the conditions were unsettled and where it was almost impossible to forecast the volume of trade even in the near future, the rapidity of national growth would have made the task of establishing a banking

system and providing a currency which should be both adequate and sound one of extreme difficulty, and the State Governments were neither sufficiently strong nor sufficiently disinterested to deal with the problem.

CHAPTER IV

FINANCE DURING THE CIVIL WAR

THE expenses of the Civil War, as in the case of the War of Independence, were met by loans and by issues of paper money, though without the same excuse. In the earlier war Congress had no constitutional right to levy taxes, and for actual money had to rely on taxes raised by the authority of the State Governments, whilst in the middle of the nineteenth century it had wide and clearly defined powers, and heavy taxation would not only have been possible but would have roused no opposition on the part of the people ; in fact, in February, 1862, it was asserted in a Boston paper that "the country presents the spectacle of a people praying to be taxed," and there was a general feeling as time went on that more taxation was necessary. The Secretary of the Treasury, Chase, who had been appointed by Lincoln when he was elected President in 1861, was known to be strongly opposed to the expedient of paper-money issues, but he found the financial condition of the country so unsatisfactory that he was driven to have recourse to them against his better judgment.

For some years past the Treasury Department had been mismanaged, and the Government had constantly had recourse to borrowing in order to meet annually recurring deficits. The National Debt, contracted during a time of peace, had risen to $76,000,000, which was higher than it had been since 1812 ; the national credit was low, securities had been selling at about 10 per cent. below par,

and for some years revenue had not been equal to expenditure.

With a war threatening in the immediate future there seemed to be no way out of the difficulty except by continuing the policy of borrowing, and Congress granted power to the Secretary of the Treasury to issue bonds and Treasury notes. Of these the Treasury notes were found to be the more convenient, as they were at par and were receivable for customs duties, and several issues were made. The so-called "demand notes," authorized to the extent of $60,000,000 before the war loans began, were Treasury notes which did not bear interest. They were issued for small denominations and so were suitable for use as currency; they were payable on demand, were receivable for taxes and duties on imports, and were paid by the Treasury to those public creditors who were willing to receive them, but were not legal tender. Interest-bearing Treasury notes running for short periods of one or two years were issued as well, in order to avoid burdening the nation with the payment of the interest for a long period, though it was realized that by this step the Government ran the risk of being called upon to redeem its notes at a time when money might be scarce and financial difficulties great. Chase realized, too, that "the greatest care . . . will be requisite to prevent the degradation of such issues into an irredeemable paper currency, than which no more certainly fatal expedient for impoverishing the masses and discrediting the Government of any country can well be devised." Yet both Secretary and Congress, confident that they could avoid these dangers, still relied on borrowing to meet the whole of the extraordinary military and naval expenditure required for the war, and the taxes levied were only sufficient to carry on the Government on a peace footing, to pay the interest on the National Debt, and to provide for a small sinking fund. Thus, at the beginning of the war Govern-

ment was receiving less than one-fourth of its revenue from taxation and more than three-fourths from loans, but was probably acting under the idea that the war would be short and that these expedients would only be temporary.

The raising of money by loans, however, proved to be by no means easy. Very little money could be obtained by this means from foreign countries, because European capitalists were not ready to lend at a time when the very existence of the United States Government seemed to be threatened, whilst, as the States were all raising war loans on their own account and the market for bonds was already stocked with State securities, it was not a favourable moment for floating a Federal loan at home. Hence the Government now adopted a new plan and acted through the banks, finding that it could obtain the money that it required more easily in this way than through its own agents. Moreover, the moment was favourable for making such an experiment, for the country had recently passed through a time of financial pressure which had resulted in a period of dull, if not of stagnant trade; consequently the banks, having little opportunity for making loans to business men, were ready and willing to come to terms with the Government, which would enable them to find employment for the capital lying idle in their vaults. It was agreed that the banks of New York, Philadelphia, and Boston should advance $150,000,000 to the Government, receiving in exchange Government securities in the form of Treasury notes running for three years and bearing interest at the rate of 7·3 per cent. The banks had expected that the money they agreed to lend would remain in their possession and would be withdrawn by cheques as it was required by the Government. Chase, however, insisted that the money should be deposited at the Sub-Treasury at New York, and this meant that large sums of money were suddenly withdrawn from the banks, and the drain of specie was felt very severely

by them. At the time when the agreement was made, the aggregate capital of these banks was only $120,000,000, and their combined reserves in coin amounted to not more than $65,000,000, which was hardly sufficient to pay the first instalment of the loan. The scheme could only be worked successfully if the banks were speedily able to replace in their vaults the treasure that they had lent to Government, and it was hoped that this could be done in two ways :—(1) by the sale of the Government securities to the general public for ready money, and (2) by the Government paying out the specie lent for the purchase of stores, and thus throwing it into circulation, with the result that it would find its way back again into the bank vaults through the ordinary channels of trade, and the banks would soon be in a position to lend further sums to the Government. Meanwhile, however, their resources were being rapidly drained, and it was clear that any delay in the sale of the securities would involve them in serious difficulties.

It was generally felt that this system of borrowing from the banks was precarious and could only be temporary. The large issues of Treasury notes in August and November, 1861, were only reluctantly received as currency, and were largely presented to the Sub-Treasury for redemption in coin, and the country anxiously awaited the report of the Secretary in December, hoping for a definite plan of finance based upon adequate taxation. The Secretary's report was, however, disappointing, for, instead of taxation, he relied mainly on a scheme for reorganizing the banks of the country in such a way as to compel them to buy large amounts of Government bonds. As a result the people began to lose confidence both in the Government credit and in the banks. Consequently not only was very little money placed in them on deposit, but withdrawals of deposits began as well ; the banks of the West began to draw heavily on their balances at New York, and the

Government securities could not be sold except at a loss. Hence, as the specie reserves were rapidly disappearing and no fresh money was coming in to take their place, the banks were soon at the end of their resources. At the end of December, 1861, the New York banks had to suspend specie payments, the other banks soon following their example; this suspension of the banks involved necessarily the suspension of the National Treasury, and consequently the Treasury notes in circulation could no longer be redeemed in coin. This caused little or no surprise, and was recognized as an inevitable result of Government policy, which had placed on the banks a burden too heavy for them to sustain. Thus within six months of the opening of the war specie payments were abandoned, and the country was exposed to all the dangers of an irredeemable paper currency.

The next inevitable step was the Bill brought in at the beginning of the next year, 1862, to make Government bills a legal tender until further notice, but it was not passed without rousing a great deal of opposition in both Houses of Congress. The idea generally prevailed that the issue of legal tender bills was forbidden by the Constitution, an idea that was held at first by the Supreme Court, which sanctioned the measure only as a temporary expedient necessitated by the exigencies of the war. The opponents of the Bill held not only that it was unconstitutional but that it would be quite possible to find alternative measures, and suggested that the necessary money could be obtained by heavy taxation, or by borrowing at a high rate of interest. The supporters of the Bill urged that it was a question of necessity and that the Government had practically no choice; they made no attempt, however, to show that the alternatives suggested were an impossibility, and merely said the legal tender Bill would be less objectionable than the sale of Government bonds below their market value—" shinning through Wall

Street," as Spaulding, the promoter of the Bill, expressed it. The Bill finally passed, a good many members who objected to the policy voting for it on the grounds of urgency, in the belief that revolutionary measures were justified by the difficulties of the war and that it would only be in force for a short time.

The Secretary of the Treasury, who, as late as December, 1861, had declared that he was strongly opposed to any measure of this sort, gave the Bill a qualified approval on similar grounds, although he afterwards acknowledged the whole policy to have been mistaken. This Bill, which became law in February, authorized the issue of notes—generally known as greenbacks—to the maximum amount of $150,000,000; the notes did not bear interest, they were to be payable to bearer, were not to be issued for denominations under $1, and were to be "lawful money and a legal tender for all debts, public and private, within the United States." An amendment was passed in the Senate, where the legal tender clause was nearly defeated, to the effect that interest on Government obligations should be paid in coin, but the Lower House refused to concur in this, because they held that it would create a distinction between different classes of Government creditors, and that it would be unfair to pay the soldier in paper and the money-lender in specie—an admission that the paper money was not expected to be for long on a par with specie. The Act did not specify how or when the notes were to be payable in coin, and the only provision made for their ultimate redemption was the funding clause, which said that they could be exchanged for bonds of the United States, bearing interest at the rate of 6 per cent., which were to be redeemable after five years and were to be paid off in twenty years; by this means it was thought that the notes would gradually be brought back to the Treasury and withdrawn from circulation. The legal tender quality conferred on them had the effect of

making them the practical standard of value as well as part of the circulating medium, and as a standard of value their great defect was instability, for their market value, as recorded by the premium on gold, was soon very much lower than their nominal value, and was affected by every influence that could in any way increase or lessen their chance of ultimate redemption.

In March the Coin Purchase Act was passed, and Government was authorized to sell bonds or notes on such terms as the Secretary should deem most advantageous to the public interest. This Act had little effect, because the Secretary interpreted it to mean that bonds might be sold at their market value but not below it, and, as the demand for them at that time was not great, very little money could be obtained in that way. The need for money continuing, Chase asked for and obtained permission in June to issue another series of greenbacks to the extent of $150,000,000, and this time there was less opposition in Congress, as the issues of February had afforded temporary financial relief. In January, 1862, a third issue of $100,000,000 was authorized in order to pay the arrears of the army and navy.

No further issues of greenbacks were authorized after the early part of this year; Congress was of the opinion that the limit of note issues of this character had been reached, and Chase, who had only adopted this policy as an exceptional war measure, acknowledged that the Legal Tender Act was unconstitutional as applied to pre-existing debts, and "valuable only for purposes of dishonesty." Yet the war was not over and the demands on the Treasury were higher now than in previous years, but for several reasons the Government was able to manage without fresh note issues. In the first place, more revenue was now gained from taxation. The increased custom duties at first had no good effect, for they proved to be mainly protective, and the receipts from duties fell off

after they were imposed, but in internal trade almost everything that Congress thought capable of yielding a revenue was subjected to a duty, and, though just at first the result was disappointing, a considerable revenue was raised as soon as the officials and the public got accustomed to the new system. In the second place, the increased amount gained from taxation also raised the credit of the Government, and it was now able to borrow on better terms. "It is hardly too much, perhaps hardly enough, to say that every dollar raised (by taxation) for extraordinary expenditures or reduction of debt is worth two in the increased value of national securities" (Chase). In the third place, ample provision for borrowing had been made in the Legal Tender Act of January, 1863, by which the Secretary of the Treasury had been authorized to borrow $900,000,000, partly for the needs of the current fiscal year, partly for the year beginning July 1, 1863, and was allowed to sell bonds bearing interest at the rate of 6 per cent. in order to obtain the money. About the same time other forms of legal tender notes were authorized, differing from greenbacks in that they bore interest and were consequently not expected to get into circulation as currency.

In March, 1863, Treasury notes to the extent of $400,000,000 were issued, bearing interest at a maximum rate of 6 per cent., and were to be legal tender for the amount for which the notes were issued, but not for the interest; the object was to get loans from small investors without adding to the currency, and as the notes were only to run for three years they would soon be paid off by the Government and cancelled. Notes bearing compound interest were also issued, and Congress sanctioned an issue of bonds bearing interest at the rate of 5 per cent., redeemable in ten years and payable in forty, generally known as the "ten to forty bonds." In the case of these bonds it was specially stated that the prin-

cipal as well as the interest was payable in coin, because the idea had already risen that Government might pay off its bonds in greenbacks. It had never been contemplated when the Legal Tender Act was passed that Government would, after selling its bonds for gold, pay them off with irredeemable paper, yet there was nothing in the Act to prevent it, and some people openly said that it would be an easy way of getting rid of the National Debt. In January, when some old bonds, which had been issued in 1841, had matured, they had been paid off in gold in order to maintain public credit, but the difficulty that had been experienced in obtaining gold for this purpose had roused alarm for the future.

In July, 1863, the funding clause of the Legal Tender Act was repealed at the instance of Chase, who hoped, as the credit of Government was improving, to be able to negotiate a loan at 5 per cent., but knew that it would be impossible to do this as long as the holders of notes could convert them into bonds at par, bearing interest at the rate of 6 per cent. The repeal of this clause was both a breach of confidence and a blunder, for, by preventing the voluntary conversion of notes into bonds, which would have taken place very rapidly as the rate of interest on Government securities fell below 6 per cent., it prevented the withdrawal of the notes from circulation and the early resumption of specie payments after the close of the war. This policy, however, mistaken though it was in the long run, gave temporary help to the Government, the sale of bonds went on rapidly, and the Government was able to pay all necessary expenses and to end the fiscal year with a balance of over $5,000,000 in the Treasury. The following year, 1864, was again a time of financial difficulty, and the issues of interest-bearing Treasury notes continued. Fessenden, who succeeded Chase as Secretary of the Treasury, found the position one of great difficulty, which was increased by military disasters. He

refused, however, to recommend any further issues of notes, as he was convinced "not only of the ability of the people to furnish, at a short notice, such sums as may be required, but (also) of the entire confidence felt in the national securities."

The Government was not solely responsible for the masses of depreciated notes with which the country was flooded during these years. One of the first results of the suspension of specie payments was an increase in the number of banks. When gold and silver first began to disappear from circulation larger note issues were required to take the place of coin, but by the summer of 1862 the deficiency had been more than compensated for by increased issues of notes both by Government and by the banks. Though it was no longer necessary for the purpose of maintaining the volume of the currency, most of the banks were largely increasing their note circulation, for they were now free from the restraining influence of specie payments, and were legally able to pay off with greenbacks the notes brought in to them for redemption. Under this system the notes even of the soundest banks could not circulate at their former value, for they would be estimated, not according to the credit of the bank that issued them, but according to the value of the paper currency in which they would be redeemed.

The economic effects of flooding the country with paper money were (1) a scarcity of coin of all sorts, and (2) a change in the standard of value by the practical substitution of the greenback for the gold dollar as the standard.

When the greenbacks were first issued it was expected that they would circulate at par with the gold dollar, containing 23·2 grains of pure metal, but a year after the first Legal Tender Act had been passed the paper dollar had an exchange value equal to only 14·5 grains of gold. Its value rose in August, 1863, to 18·4 grains, but fell in July, 1864, to 9 grains, which was its lowest point; the premium

on gold was then 285, and the dollar in paper was not worth more than 36 cents in coin. When in January, 1862, the premium on gold first became noticeable, the trade of the ordinary dealers in gold bullion and foreign coins increased so enormously that the need for a regular gold exchange was felt. At first "people desiring to buy gold naturally went to the dealers in foreign coin, who displayed the precious metals in their shop windows, and people who had specie to sell took it to the same places. But very soon the business became too large to be conducted in this fashion. The small offices of the money-brokers were overcrowded, and traders blocked the side walks of narrow Wall Street to such an extent that the police were given special orders to keep the crowds moving. This state of affairs led to an organization of the traffic and the formation of gold exchanges. From the public tables of the premium it appears that regular dealings in gold began in the New York Stock Exchange on January 13, 1862. Here it was regarded as the patriotic and gentlemanly thing to sell gold. A second and less decorous market was formed in a dingy cellar in William Street, dubbed the 'Coal Hole.' A number of men who were devoting themselves exclusively to dealing in gold took refuge in this place when their business grew too large to be conducted in their private offices or in the street. As the number of brokers increased the 'Coal Hole' was found too small, and the company moved to more commodious quarters. For some time the members of this exchange, that came to be known as the 'Gold Room,' contented themselves with a very loose organization. It was not until October, 1864, that a constitution and by-laws were adopted and regular officers elected" (Mitchell, "History of the Greenbacks"). The union was purely voluntary; any respectable business man was allowed to join on contributing $100 a year to help to defray expenses, and its membership soon rose to 450.

At first gold was handed over the counter in exchange for notes and cheques, but so many cases of robbery and violence in the neighbourhood of the offices occurred that an Exchange Bank was started as an adjunct to the Gold Exchange, and acted as a clearing house for it at a fixed rate of compensation as well as doing regular banking work. The amount of business done by the Gold Room was soon very great, and its daily and hourly quotations of the price of gold, reported by telegraph all over the United States, were generally accepted as authoritative. A good deal of the work done was legitimate business; traders importing goods into the country came to buy gold in order to get coin to pay the customs duties, and exporters would sell in advance, as soon as their goods were sent off, the gold they expected to receive a few days later, in order to avoid the risk of possible loss through fluctuations of the currency in the immediate future. The amount of speculative business done was, however, far in excess of ordinary business, for numbers of people in every walk of life hoped to make money by speculating on changes in the value of gold in the near future, and this Gold Room gambling often brought about violent though temporary fluctuations in the premium on gold. Sometimes a clique of gamblers would combine to raid the market and make a corner in gold. The most striking example of this was the Black Friday conspiracy of September 24th, when Jay Gould and a few others bought up large quantities of gold, making an artificial scarcity, and on this date gold could only be obtained from Gould and his friends, naturally only on ruinous terms, and many firms were severely injured. The temptations and opportunities that the financial situation of the country afforded for gambling in gold were freely taken advantage of, and from the way prices and securities were affected it added considerably to the financial difficulties of the period.

Congress for a long time steadily refused to face the fact that notes had become depreciated, and, as had been the case in England in the early years of the nineteenth century, held that gold had risen and not that paper had fallen in value. Yet it was evident that gold had risen only as against paper and not as against other commodities; for gold as bullion was plentiful, and bankers said they could "find no commodity as cheap as gold to ship and draw against." To try and check gambling in gold and reduce the premium on it the Anti-Gold Law was passed, prohibiting under heavy penalties all contracts for the sale of gold for future delivery, and forbidding also the sale of gold by a broker outside his own office. The effect of this was to close the Gold Room and stop the quotations of gold at the Stock Exchange, but the uncertainty as to the future sent the premium on gold up to 197½ just before the Bill passed, and it was very soon repealed. It was evident that the premium on gold could only be reduced by a rise in the financial credit of the Government, and Chase acknowledged before he left office that only victories and heavy taxation would be able to effect this.

The advance in prices, that went hand in hand with the depreciation of the paper currency, was very marked but by no means uniform, for prices rose farther and faster than the premium on gold, and between the years 1860 and 1865 the money value of the necessaries of life rose about 50 per cent., whilst the advance of prices generally was from 100 per cent. to 200 per cent. Certainly there were other causes besides excessive issues of paper money which would account partially for this—the extensive purchases of war supplies by the Government, the interruption of supplies from the Southern States, the internal taxes on articles produced in the country, and the decline in the value of gold as a result of the gold discoveries—but allowing for all these, the main

cause of the disturbance of prices during the war was undoubtedly the paper currency. Wages rose, but not in proportion to prices, the depreciation imposing on wage-earners a tax amounting to nearly 20 per cent. of their income. The usual pay of a soldier, for instance, was \$13 a month, which in 1862 was equal to \$11·26 in gold, and would purchase goods to the former value of \$11·11; by 1865 the pay of the soldiers had been raised to \$16 in paper money, but these \$16 were now only equal to \$10·77 of gold, and would only purchase goods to the extent of \$7·69 at their former values. Yet comparatively little discontent was caused by this enormous rise in the cost of living, partly because the political excitement ran so high, partly because wages had been sufficiently high before the war to leave a margin for reduction without reducing the worker to abject poverty.

The excessive issues of paper money naturally had the result of driving coin out of the country. The greater part of the gold coinage disappeared almost at once by the action of Gresham's Law. There had been practically no silver dollars in circulation since the beginning of the century; the subsidiary silver coinage, which had been reduced in value by the Act of 1853 in order to keep it in the country, remained in circulation only until gold had risen sufficiently to give the brokers compensation for collecting and exporting the coins, and by June and July, 1862, the smaller silver currency as well was rapidly disappearing.

An article in the *Springfield Republican* for July 2, 1862, quoted by Mitchell in his "History of the Greenbacks," stated: "The ruling premium of 5 or 6 per cent. on silver coins as compared with the paper currency in use is fast driving it out of circulation. Labouring people and those of small means are constantly to be seen at brokers' offices, selling \$10 or \$50 of silver change at 2½ per cent. premium, which the brokers ship to Europe, where they

can realize 6 or 7 per cent. in comparison with our irredeemable paper currency." The *New York Times* for July 18th complained: "The annoyances suffered in this city and throughout the country during the last two or three weeks on account of the scarcity of specie have been unspeakable, and in many lines of business the loss of custom and profit has been heavy." A great deal of coin was exported to Canada, where it became a drug in the market and was only taken at a discount.

Great inconvenience was necessarily caused in the retail trade. In some districts old Spanish quarter-dollars of light weight were again brought into use, dollar bank-notes were cut into halves and quarters and passed for 50 and 25 cents, and many shops refused to give change for paper at all, or charged a premium on the silver returned. Bank-notes for less than a dollar—generally known as "shin plasters"—were forbidden by the laws of a good many States, but these laws were now openly violated, and the need for small currency was so great that no attempt was made to enforce them. More often, however, these shin plasters were issued by firms and individuals not engaged in banking: for example, the Chicago City Railway Company supplied 25-cent tickets which the conductors gave in exchange for paper bills and accepted as fares. Hotels and shops issued small notes stamped with the name of the proprietor which could be passed from hand to hand, whilst, to prevent loss to the public from fraudulent issues, many towns and cities provided for municipal issues of small notes.

The difficulty was so great that in June, 1862, Congress authorized the use of "the postage and other stamps of the United States" as currency. The result, however, was not satisfactory, partly because it was difficult for the Post Office to cope with the sudden and enormous increase in the demand for stamps, the value of the stamps sold in New York rising in two days to over five times the usual

amount, partly because stamps were too small and adhesive and were not sufficiently durable to be a convenient form of currency. Consequently Congress ordered special stamps to be prepared for use as notes of the value of 5, 10, 25, and 50 cents. These notes were in the form of pieces of paper printed on both sides with the facsimile of a stamp and not gummed. The demand for this currency was so great that it was impossible to keep pace with it, and by March, 1863, the amount in circulation was of the value of $20,000,000. It was soon superseded by the issue of United States notes for sums under the value of a dollar, and these notes were of thinner and stronger paper, and were not so easily counterfeited.

As the premium on gold rose, even the copper and nickel coins began to disappear. By the Act of 1857, the old copper cents weighing 168 grains had been replaced by coins weighing 72 grains, consisting of 88 parts of copper to 12 of nickel, and by the summer of 1862 the old cents were rapidly disappearing. The new cents were much more generally used as the small silver coins disappeared from circulation, and, as the demand for them was so great that the Mint was unable to cope with it, they were soon at a premium, not, as in the case of gold and silver, because the market value of the coin was greater than its nominal value in terms of paper money, but because they bore a scarcity value. It was suggested that the demand could be supplied more easily if bronze, which was a less expensive metal, were used instead of nickel, and bronze coins of the value of one and two cents were struck, which were gladly accepted by the public, and on the coinage of which the Government made a considerable profit. Coins to the value of two, three, and five cents were authorized by later Acts, and the issue of fractional notes for sums of five cents and less was prohibited.

In some of the Western States attempts were made to

maintain specie payments after they had been given up in the East. Both Kentucky and Indiana had charters which forbade the redemption of notes in anything but coin, but their Legislatures soon found it necessary to modify these Acts, and the question of the legality of redeeming bank-notes with greenbacks had to be faced in other States as well. It was only in California, where paper-money had been hitherto almost unknown, that the gold standard was maintained during the war, and it was only maintained there with great difficulty. In November, 1862, the merchants of San Francisco agreed that they would neither receive nor pay legal tender notes except at their market value in gold, and the State Government refused to receive greenbacks in payment of the taxes on the ground that taxes were not debts and consequently the Legal Tender Act did not apply to them—an opinion which was afterwards upheld by a decision of the Supreme Court. In February, 1863, the Californian Legislature asked Congress to exempt that State from the operation of the legal tender law, and, when this demand was refused, passed a Specific Contract Law to enforce the fulfilment of a contract in any form of payment stipulated for. These measures were at any rate partially successful, and the districts on the Pacific Coast were saved from the worst evils of a depreciated paper currency.

The financial expedients of the Confederate Government were more disastrous even than those of the United States Congress, and it relied to an even greater extent on issues of paper money to defray the expenses of the war. In the first year of the war hardly any attempt was made to get money by internal taxation, and the blockade prevented any revenue accruing from the customs duties. In 1863, when the need for taxation was at last realized, the currency was in such confusion that the only way in which a tax could be taken with any satisfactory result was in the form of produce needed for the sup-

port of the army, and this was unfair to the farmer, who had to pay the tax in goods of real value, whilst other people were allowed to pay it in depreciated paper. As in the Northern States, irredeemable notes, issued in excessive quantities by the Government, were used as currency, and, though they were never made legal tender, the disappearance of other forms of currency and the almost total absence of coin made their acceptance by the public almost as compulsory as if legal tender authority had been given to them. Moreover, the Confederate Government made no attempt even to pay the interest on their loans in coin, though it would have been quite possible to have bought specie at its market value for this purpose.

In September, 1862, an Act was passed authorizing note issues to any extent that would be necessary to defray public expenses, and by the end of the year the outstanding notes issued by the Confederate and State Governments amounted to $500,000,000. The following year an attempt was made to get rid of the depreciated Treasury notes by a system of compulsory funding, and an Act was passed saying that all notes not converted into bonds by August 1st were to be no longer either current or convertible and new note issues were ordered to take their place. It was impossible, however, to get all the old notes brought in, and they continued to circulate in defiance of the Government prohibition side by side with the new issues, the total volume amounting before the end of the war to $1,000,000,000. With this mass of worthless paper issued by the Confederate Government, the States, the banks, and private firms and individuals, the currency rapidly became quite unmanageable, and the total collapse of credit that resulted hastened the close of the war.

The excessive issues of paper currency both in the Northern and Southern States increased enormously the

expense of the war to the Government, and consequently to the country. Just at first the Government profited by the note issues, because it could pay off contracts made when gold was at par with notes which were already depreciating, but a little later, when forced to expend large sums in the purchase of war stores, it suffered severely from the rise of prices and the decline in the purchasing power of the greenbacks—almost the only form of currency in which payments were made to it. In 1865 Government was paying off, at a time when the value of money was rising and prices were falling, debts contracted at a time when the value of money was at its lowest and prices at their highest, and was losing at the rate of 25 per cent. or 30 per cent. The extra cost of the war due to the depreciated currency has been variously estimated, but the lowest computation gives it at $528,000,000, and about one-fifth of the public debt, which reached its maximum height—$2,846,000,000—at the end of August, 1865, was due to the substitution of United States notes for money. Hulberd, Comptroller of the Treasury, writing after the war was over, gave as his opinion that "probably not less than 33 per cent. of the present indebtedness of the United States is owing to the high prices paid by the Government while its disbursements were heaviest." The people suffered not only through the increased demands that had eventually to be made on them by the Government to enable it to meet its obligations, but also from the curtailment of credit and the disturbance of all business relations, and the wage-earners suffered a direct loss to the extent that the rise in wages fell short of the rise in the expense of living.

McCulloch, Secretary of the Treasury in 1865, wrote: "There is no fact more manifest than that the plethora of paper money is not only undermining the morals of the people by encouraging waste and extravagance, but

is striking at the root of our material prosperity by diminishing labour." Just at first the issue of irredeemable paper money seemed to stimulate the production of wealth, but it was soon evident that its effect was to substitute speculative activity for steady industrial pursuits, and to give free play to all the most selfish and dangerous elements of industrial and commercial life.

CHAPTER V

FINANCIAL HISTORY AFTER THE CIVIL WAR

Part I

THE policy of establishing a system of national banks was inaugurated by Chase during the war, with the object of making the bank-note circulation a means of enlarging the sale of Government securities, but the scheme was not actually brought into operation until the war was nearly over. The advantages that he anticipated were (1) the provision of a national and uniform paper currency secured by a pledge of United States stocks, which would be an inestimable benefit to the country, and (2) the assurance of financial help for the Government by gaining a steady market for Government securities and so maintaining their price.

By an Act passed in 1864 it was determined that banks, either newly established or already in existence, might become national banks by depositing with the Secretary of the Treasury registered bonds of the United States to the extent of one-third of their capital, provided the amount were not less than $30,000, receiving in return from the Comptroller of the Currency notes for circulation to the extent of 90 per cent. of the face value of the bonds deposited, but not exceeding the market value. The notes were not to be full legal tender, but were to be received at par for all dues payable to the United States, except duties on imports, and could be used

for all payments made by the Government within the country with the exception of the payment of interest on the National Debt and the redemption of the national paper currency. Moreover, a national bank was bound to receive the notes of any other national bank at par in payment of a debt due to itself. The notes were redeemable at the counter on demand, and the banks were forced to keep a reserve in lawful money equal to 25 per cent. or 15 per cent. of the notes in circulation, according to the place in which the bank was situated. The limit of the aggregate note circulation of the national banks was placed at first at $300,000,000, half of which was to be divided among the banks in the various States and Territories in proportion to their population, whilst the other half was to be distributed at the discretion of the Secretary of the Treasury. Banks wishing to be admitted to the system could apply to the Comptroller, who was granted full powers to accept them or not at his discretion and was not bound to give any reasons for his decision. Public money might be deposited in the national banks at the discretion of the Secretary upon giving adequate security "in Government bonds or otherwise."

There were several features in the system that were a novelty in American banking. Firstly, the Government and not the banks was directly responsible for the notes, and banks joining this system had to substitute the notes issued by Government for the private notes they had circulated hitherto; hence there was more uniformity in the paper note circulation than there had been before. Secondly, there was certainty of redemption, for all the notes were secured on Government bonds and an adequate reserve was insisted on. The power of redemption, however, was not of very great importance at first, for the clause stating that the reserve kept for that purpose was to be in "lawful money" allowed

the banks to redeem their notes in depreciated legal tender paper money, and consequently very few notes were presented for redemption. This was, however, unavoidable, for if the Government had attempted to place national bank-notes on a par with gold, instead of on a par with the currency in actual use, they would have borne a premium like gold and would have disappeared from circulation. Thirdly, reports were to be made at stated intervals to the Government, and this brought the banks under Federal supervision, and acted as a restraining influence. Fourthly, the Government obtained financial help, for the banks had to buy large quantities of Government bonds in order to obtain the notes for circulation, and the necessity of keeping a reserve forced them to hold a considerable amount of legal tender notes as well. The chief defect of the system was the want of elasticity in its note issues, which prevented them from expanding and contracting with the needs of the commercial community. Whatever the state of trade, note issues could only be increased by a further deposit of Government bonds in the Treasury; but, as the banks were working primarily to get profits for their shareholders, they bought Government bonds, not when the community required an expanding currency, but only when it was most profitable to themselves to do so—that is, when Government securities were cheap. Hence in times of financial pressure the banks were unable to afford relief by increasing their issues, and the only way in which the tension could be relieved when financial disaster seemed imminent was by the Government throwing more money into circulation by buying up its own bonds, very often at a high premium—a method of giving financial relief that was very expensive for the country.

The Act passed in June, and, though no notes were issued until September, the fact that the scheme had been sanctioned encouraged the sale of Government se-

curities, and so kept up their price. The State banks already in existence did not at first show themselves to be very favourably disposed towards the new system, especially in the Eastern States, for the war was not yet over, and they feared that if they were too closely connected with the Government they would be involved in its fall if the integrity of the Union were not maintained; moreover, there was a danger of the bank system becoming involved in party politics and falling a victim to hostile legislation initiated solely for party purposes. The Government, however, left them very little choice, for Chase inaugurated the policy of taxing the private bank-note circulation out of existence. The destruction of the State banks as banks of issue had not been intended when taxation had been first suggested in 1862, for the idea then had been merely to secure by a moderate tax a proportion of the profits of the note circulation for the Government, and it was only later that it was adopted as a means of reducing the volume of State bank-notes and gradually substituting for them the notes of the national banks.

The Revenue Act of 1865 imposed a tax of 10 per cent. per annum on the notes of State banks paid out by them after July 1, 1866, with the express object of driving them out of competition with the national bank-notes and enlarging the market for Government bonds In 1867 the Act was extended to any national or State bank paying out the notes of any town, city, or municipal corporation, and in 1875 to persons, firms, or corporations paying out their own notes or any other notes except those of a National Bank Association. Hence all the banks which wished to continue their note circulation were drawn into the new system, and the number of national banks had by the summer of 1865 risen to 1,014, the change taking place with very little friction and without any interruption of the ordinary work of the banks. It was soon found necessary to exceed the limit of $300,000,000

for the note circulation, for the West, where there were very few stable banks, had been very inadequately supplied with notes, and the difficulty was increased when the Confederate States were again recognized as members of the Union. Consequently in 1870 an increase of $54,000,000 in the bank-note circulation was authorized, and the following year the limitation was abolished altogether, and the only restriction was the obligation of depositing bonds in the Treasury, which proved to be a very practical and effective check on over-issues.

The resumption of specie payments was the most pressing question to be dealt with as soon as the war was over, for the Government had never intended the Legal Tender Act to be anything more than a temporary expedient. But, notwithstanding the financial difficulties in which the excessive paper issues had involved the country, it was not until 1879 that the work was completed; for not only was there no great demand on the part of the general public for resumption, but, as time went on, a party grew up who were distinctly hostile to it. Several reasons may be assigned for this. In the first place, paper money had always been very popular in the States, and one result of the period when legal tender notes had formed the main part of the currency was that people failed to recognize the distinction between paper money and coin, and the impression had insensibly arisen that by issuing legal tender notes the Government was able to create money. When the right of the Government to pay the interest on bonds in greenbacks—which would mean paying off the national debt without taxation—could be seriously discussed, it was evident that paper money, which cost the Government practically nothing to issue, seemed to the people, especially in the Western States, to be equal in value to gold and to serve the purposes of currency as well as gold, and apparently there was no reason why it should not take the place of

gold entirely. In the second place, there was a very prevalent idea that the country required a great deal of money—an idea that arose from confusing currency with capital. Sumner, in his "History of American Currency," defines capital as "that portion of all the previous product of a nation which at any given time is available for new production," whilst banks "only facilitate the transfer of capital from hands where it is lying idle into hands by which it will be usefully employed. Currency, therefore, is not capital, any more than ships are freight; it is only a labour-saving machine for making easy transfers." It was in the West that this confusion of thought was most noticeable and that the inflation movement, as it was called, had most influence. The enormous task of opening up the West was being undertaken rapidly and often recklessly—the amount of capital that could be absorbed in this way was almost unlimited, whilst the opportunities for speculation and fraud were almost equally great. Overtrading and the sinking of capital in great enterprises that could only be slowly remunerative were bound to lead to a time of financial pressure. It was the excessive issues of paper money which had helped to stimulate this overtrading, and when the reaction came, almost simultaneously with the Government attempts at restricting the currency, the people, confusing cause and effect, attributed the evils which were really due in the first instance to an inflated currency to the restriction of the currency, and clamoured for more money, with a total disregard of its quality, when what was really required was more capital and a better regulated monetary system.

This hostility to the policy of restriction, however, did not make itself felt for some years, and both the Secretary of the Treasury and Congress concurred in the desire to bring about resumption of cash payments as soon as possible. In April, 1866, an Act was passed

authorizing the Secretary to sell bonds for the purpose of "retiring Treasury notes or other obligations issued under any Act of Congress . . . provided of the United States notes not more than $10,000,000 may be retired and cancelled within six months from the passing of this Act, and thereafter not more than $4,000,000 in any one year." The ultimate effect of this Act in reducing the paper currency was modified by the Greenback Reserve Act, passed the same year, which held that as the Act of 1864, fixing $400,000,000 as the maximum limit of greenback issues, had not been repealed, the difference between the whole amount of greenbacks outstanding and this maximum amount of $400,000,000 could be kept as a reserve in the form of greenbacks in the Treasury to be used at the discretion of the Secretary. This Act, however, could have no effect as long as the notes remained in the Treasury, and the report of 1866 showed that by the end of the year the financial condition of the country had considerably improved ; the National Debt had been reduced by $164,000,000, the cash balance increased by $42,000,000, the amount of outstanding greenbacks decreased by nearly $43,000,000, and legal tender notes bearing interest withdrawn to the extent of nearly $100,000,000. A sufficient gold reserve was kept in the Treasury, and the increasing investments of foreigners in United States securities prevented the necessity of exporting the gold produced in America, and helped to place the country on a sounder financial basis.

The feeling against any contraction of the currency was, however, already rising. Johnson, in his message to Congress, though urging the necessity of resumption, said that the reduction of the paper circulation need not necessarily follow, and in February, 1868, when greenbacks to the extent of $44,000,000 had already been withdrawn, the Resumption Act of 1866 was suspended. Two years later greenbacks which had been brought in

and redeemed were reissued to the extent of $6,000,000. The wisdom of this policy was, however, called in question. President Grant, for instance, said that the only way in which fluctuations in the value of the currency could be stopped was by authorizing the Treasury "to redeem its own paper at a fixed price, whenever presented, and to withhold from circulation all currency so redeemed until sold again for gold." He held, and with some justice, that the return to specie payments ought to be brought about gradually, for too rapid and violent changes would press hardly upon those who had contracted debts in a depreciated currency when prices were high and could be called upon to discharge them in full in currency of much higher value.

The whole period from 1873 to 1879 was a time of trade depression, and a time when financial difficulties were especially acute. The cause of the trouble lay in the reckless extent to which great enterprises such as railroads, public buildings, etc., had been undertaken, and now that the reaction had set in, people attributed the trouble entirely to the contraction of the currency, and regarded the withdrawal of greenbacks as the destruction of so much actual wealth. They had grown thoroughly accustomed to paper money, and there was little desire to substitute specie for it. "It paid the soldiers, built the railways, lifted the mortgage from the farm. What more could be asked of any sort of money? It was the money of the common people; it served all their purposes when they had it, but now it was apparently growing scarce. Bankers said they had none to lend, debtors had none with which to pay. Buyers found money scarce and were unable to pay the old prices for products. Everybody was afraid to buy for fear that when he wished to sell he could not 'get his money back.' These were the practical facts, superficial though they may have been. Business was drooping, values had all gone to pieces apparently

for the want of that which it cost the Government nothing to supply" (Wildman).

To relieve the pressure, the Secretary purchased bonds with a large part of the Treasury Greenback Reserve, thus throwing more notes into circulation, and an Inflation Bill proposing to add to the volume of legal tender notes to the extent of $400,000,000 was actually passed by Congress, and was only prevented from coming into operation by the veto of the President. The inflationist party showed an almost fanatical attachment to this form of currency, and, while they urged its retention on the ground of convenience and economy, the extravagant terms in which they spoke of it—describing it as "an instrument of exchange more perfect than that of any other nation," and as "a grand trophy of the war, and held dear in the heart of every American citizen"—convey the impression that the American Government had discovered an Eldorado in the establishment of a currency of irredeemable paper.

In spite of this feeling, however, another Specie Resumption Act was passed in 1875. This Act removed the limitation on the issue of national bank-notes, provided as before that bonds to the requisite amount were deposited as security at the Treasury, and authorized the Secretary of the Treasury to redeem greenbacks to the amount of 80 per cent. of the new bank-notes issued until the total volume had been reduced to $300,000,000. It was also provided that after January 1, 1879, the Secretary should redeem in coin all outstanding legal tender notes presented at the office of the Assistant Treasurer in sums of not less than $50, and the sale of bonds to provide means for redemption was authorized without any limitation of amount. In one respect the wording of the Act was not clear, for it was not definitely stated that greenbacks, after having been brought in and redeemed in coin, could not be reissued, and difficulty

was caused by this later. The success of the Resumption Act depended largely on the action of the banks, which held legal tender notes to the extent of over $125,000,000, and they agreed among themselves that they would not discriminate in future between gold and legal tender notes, would decline to receive gold as a special deposit, and would abolish special exchanges of gold cheques at the Clearing House. As a result of this policy, gold sold at par by the end of the year 1878, and with the disappearance of the premium on gold the Gold Room of the New York Stock Exchange was closed. It was thought at first that the bank-note issues would soon increase and take the place of the legal tender notes which had been withdrawn, but the price of bonds was too high to make it profitable for the banks to try and deposit in the Treasury the quantity required before new issues could be authorized. The next year an attempt was made to repeal the Act, and, though it was thrown out by the Senate, the change desired was brought about by an Act which was passed in 1878 forbidding the withdrawal and cancelling of any more legal tender notes. The outstanding volume of greenbacks remains at the present day as it was left by the Act, at $346,681,016, with the exception of a few notes lost and destroyed.

Part II

In anticipation of the change in the circulating medium, that was expected to take place when resumption of specie payments should be enforced, an Act for the revision of the coinage was passed in 1873, although at that time there was hardly any coin in the country. The chief feature of this Act was that it adopted for the country what was practically a single gold standard, and reduced silver money to the position of a subsidiary coinage by declaring that it was not to be legal tender for

any amount over $4. There was at this time a general movement in favour of a gold standard, which seemed likely to become universal; the monetary conference at Paris in 1867 had recommended the adoption of a single gold standard and an international coin; Germany had changed to a gold standard, and the Latin Union had suspended the unlimited coinage of silver.

In the United States gold had been for some time relatively the dearer metal; it was overvalued at the Mint, and consequently under the bimetallic system it would be impossible to keep silver coins in circulation. Hence the gold dollar was now taken as the unit of value instead of the silver dollar, and this change, together with the restriction of the legal tender value of silver coins, established, though it was not realized at the time, a single gold standard. The charge on the coinage of gold was reduced to one-fifth of 1 per cent., and two years later was abolished altogether in order to attract silver to the Mint. The gold coins authorized were the eagle ($10), the double eagle, and the half and quarter eagle; coins of the value of $3 and $1 were also struck, but were not continued after 1890.

The subsidiary coins authorized were—in silver, the trade dollar, the $½ and $¼ and the dime ($$\frac{1}{10}$), which were all legal tender up to $5; and in baser metal, the 5-cent, 3-cent, and 1-cent pieces, with legal tender value up to the amount of 25 cents. The only silver coin which the public had the right to demand in exchange for silver bullion and of which the coinage was therefore unrestricted in quantity, was the trade dollar, but that was intended only to be used in the trade with China, and it was only by inadvertence that it had been placed among the other silver coins and given limited legal tender power. As it was heavier than the Mexican dollar it was not thought likely that it would be used for home circulation; but, as soon as the price of silver

fell, owners of bullion could make a profit by bringing it to the Mint for coinage, and by 1876 trade dollars had become so plentiful that their legal tender quality was abolished altogether, and two years later their coinage was stopped. The position of the ordinary silver dollar was left uncertain. There were very few of these dollars in circulation, for, though a good many had been coined since 1836, the premium on gold had caused most of them to be exported. There was no mention of them at all in the Act of 1873, but, as it prohibited the issue of any coins except those specially mentioned, they could no longer be coined, and whether the few still in existence retained their full legal tender quality or not was doubtful.

The great increase in the production of silver about 1870 and the consequent fall in its value relatively to gold had considerable effect on the currency legislation of the United States. For many years it had been impossible to keep silver dollars in circulation because silver had been worth more in the form of bullion than as coin. As late as 1872 the value of the metal in a dollar was $1·02, but two or three years later, when the market was being flooded with the output from the Nevada mines, and when Germany, after the adoption of the gold standard, was selling off its old silver coin as bullion, there was a change, and for the first time for many years silver was worth more in the form of coin than in the form of bullion. This gave rise to a demand for the remonetization of the silver dollar and for the free coinage of silver, the agitation in favour of a silver currency receiving an impetus from two directions. In the first place, the mine owners, who naturally wanted to get a steady market for their produce, thought that free coinage would effect this, and would also prevent the price of silver falling as low as it would do otherwise. In the second place, the idea that it was advisable to have as large a currency as possible was still prevalent, and the old inflationist party

who had advocated the retention of greenbacks, now appeared as the silver party and clamoured for the free coinage of silver on the ground that, as the metal was cheap and plentiful, it could be coined in large quantities. These views found expression in the Bland Bill, which was brought in, but not passed, in 1876, "to utilize the products of the gold and silver mines." It proposed that the owners of bullion should be allowed to deposit it to any amount at the mints and assay offices of the United States, receiving for it "coin notes," or gold and silver certificates, which should be full legal tender and redeemable in coin.

The same year the Silver Commission was appointed to discuss the question of restoring the double standard, and their report was distinctly favourable to silver. They held that the fall in the value of the metal was due not to increased production but to its demonetization in so many countries, and attributed the economic troubles of the time to the diminished supply of money; hence they advocated a return to the double standard, and gave it as their opinion that the resumption of specie payments and the convertibility of notes into coin would not be practicable with the single gold standard. The feeling all over the United States was strongly in favour of bimetallism, and it was on American initiative that the International Conference of 1878 was summoned in the hope of fixing a common ratio between the metals and thus paving the way for universal bimetallism. There was a difference of opinion among the silver advocates as to how far it was possible to act independently of other countries, the more conservative branch of the party holding that bimetallism was only possible by common agreement, the extremists, on the other hand, declaring that the United States could quite safely adopt it in any case, as the constantly diminishing gold supply would eventually force other countries into the same course of action.

It was the influence of the conservative party that was seen in the Bland-Allison Act, passed as an amendment of the Bland Bill in 1878. This Act restored the coinage of the silver dollar, giving it again the full legal tender power that it had possessed before the Act of 1873, but on the other hand it would not allow free and unlimited coinage of silver. It was arranged that the Government should spend not less than $2,000,000 or more than $4,000,000 of its regular revenue every month in the purchase of silver bullion for currency purposes, and it was thought that, by limiting the coinage of silver to a maximum amount of $4,000,000 a month, the danger of the depreciation of the dollar, which might follow if the surplus silver of Europe could be poured into the American mints, would be avoided. Thus after this Act was passed there were three sorts of money issued by Government which were supposed to be kept at par with gold—Treasury notes, greenbacks, and silver dollars.

It was intended that the metal purchased by the Government should be paid out by the Treasury in the form of coin, and it was thought that in this way silver would replace in the currency the gold or greenbacks with which it had been purchased. These expectations were not realized, for the simple reason that both from prejudice and for convenience people preferred gold and paper money to silver. Hence, as in order to maintain the theory of the equality of the two metals the Treasury was obliged to receive payments of taxes in either at the option of the payer, and to make payments in either at the option of its creditors, it was constantly receiving payments in silver and paying out gold or notes. Thus, as a result, silver accumulated in the Treasury, and eight months after the Act had been in operation, though silver dollars had been coined to the extent of $36,000,000, less than a fourth of this amount was in actual circulation.

Just at first the dollars had circulated freely, because

the years 1879–81 were years of commercial prosperity, when a larger amount of currency could be absorbed, but in 1881 the tide turned and the increased supplies were no longer needed. By 1884 it was evident that the country was saturated with silver and that no more could be absorbed for purposes of currency, while it was impossible also to use silver coin for foreign trade except at a discount of at least 12 per cent. Yet, in accordance with the Act of 1878, the monthly purchases of silver continued, and there was a danger that before long the Government would have nothing but silver left in the Treasury and that it would be practically on a silver basis. Various steps were taken to try and avert this danger and prevent the Treasury being denuded of gold and legal tender notes. In 1885 silver certificates were issued for sums of one, two, and five dollars against silver that was actually in the Treasury. It was found that, though silver dollars would not remain in circulation, the people were quite willing to use silver certificates, and, as the issue of greenbacks for denominations under five dollars was stopped, they were generally used for small transactions. The Government still had the inconvenience of keeping the silver coin, but the ownership of the metal belonged to the people who held the certificates, and heavy payments to the Government were now made for the most part either in gold or in legal tender notes. In 1886, in order to force some silver coin into circulation, the Government paid the expense of transferring it to any part of the country in the case of sums of not less than $500. In the South and West—the parts most distant from the capital—the cost of transport was a consideration, and the bankers were glad to avail themselves of the Government's offer, with the result that dollars began to circulate freely in the West as soon as people got accustomed to them, whilst in the East gold and paper were still used almost exclusively.

Notwithstanding the fact that the value of silver was still falling and that the circulation of silver coin could only be maintained by artificial means, the Sherman Act was passed in 1890 with the object of maintaining gold and silver on a parity. The amount of silver to be purchased monthly by the Treasury was now definitely fixed at 2,000,000 ounces of bullion, or silver to the value of $4,500,000; and to enable these purchases to be made the Government was given unrestricted authority to issue Treasury notes with full legal tender quality, redeemable on demand in coin. After the first year the quantity of dollars coined was not to be greater than was necessary for the redemption of these notes, which were to be payable in gold or silver at the option of the Government.

The reasons for the passing of the Act were political rather than financial, the Republicans voting for it in order to gain the support of the silver party to McKinley's Tariff Bill; yet the Democrats, who were for the most part extreme silver advocates, were not satisfied with it because it still did not allow unlimited coinage of silver. It was clear, however, by this time that there was so little chance of bimetallism being adopted by international agreement, that the United States delegates, who attended the International Conference at Brussels, confined themselves to an attempt to get some steps taken that would increase the use of silver as money in order to avoid depreciation. Thus even in the United States the double standard was no longer a question of practical politics.

As an attempt to maintain equality between silver and gold the Act was a failure, and the only result was an exportation of gold almost unprecedented, which threatened to place the Treasury entirely on a silver basis. The currency was already sufficient for the needs of the country, and when it was increased by the issue of legal tender notes to the annual value of $50,000,000, there was

a tendency for gold to be withdrawn, the new notes being, in fact, substituted for gold. Moreover, as the Baring crisis had caused general alarm and other countries were trying to increase their stock of gold, large quantities of United States securities were returned to the country to be redeemed with gold, and consequently a steady drain of gold for exportation set in. It was evident that unless this movement was checked the country would again be exposed to the evils of a depreciated paper currency, and the Government was at length forced to acknowledge that the increasing scarcity of gold was caused mainly by a disordered and inflated currency. Less and less of the revenue was being paid in the form of gold, both the banks and the Treasury were trying to guard their gold reserves, and payment of gold through the New York Clearing House had practically ceased. In January, 1893, the gold reserve in the Treasury was only $8,000,000 above the legal minimum of $100,000,000, and in order to help the Government and avert a panic the New York banks consented, though it was against their business interests, to give up voluntarily to the Treasury some of their stock of gold reserve in return for legal tender notes. The relief, however, was only temporary; by April the reserve had fallen below the legal minimum, and the fear that the Treasury would suspend specie payments or would enforce its legal right to redeem notes in silver instead of in gold led to a panic in which a hundred and fifty-eight national banks suspended payment. This crisis was mainly financial and not commercial—that is, it was not caused by industrial conditions or speculation so much as by the fear that the standard of value would be altered, for the drain of gold threatened to leave the Treasury with a specie reserve of silver only, and the closing of the Indian Mint to silver in June had caused sudden and violent fluctuations in its value, the gold price of the silver dollar falling in three days from 82 to 67 cents.

To avoid the danger of being left with a reserve of depreciated metal, Congress repealed the Sherman Act, though leaving in force the clause that reversed the Act of 1878, and consequently all compulsory purchase of silver by Government now ceased; but it was some time before confidence was restored, and in the following year the gold reserve in the Treasury had fallen to $65,000,000. In the hope of attracting gold the Government, in 1894, issued bonds to the extent of $50,000,000, which were to be paid for in gold coin only; but the market was stagnant and few people wanted to invest. By February, 1898, the gold reserve had not only dropped to $41,340,181, but was falling steadily at the rate of $2,000,000 a day, and there was a general belief that the suspension of gold payments was imminent. At this crisis help was obtained from the large international banking houses, generally employed as agents for important Government transactions in the money market. The Bond Syndicate was formed by them, and they guaranteed the maintenance of the Treasury gold reserve and did their utmost to prevent further withdrawals of gold. By the influence of this syndicate gold was purchased by the sale of Government bonds, though at a heavy price; the gold reserve was soon increased, and when it was seen that there was no danger of a suspension of specie payments the financial alarm subsided.

By this time, though the silver party had not entirely abandoned the struggle, the gold standard had practically triumphed, and the Currency Act of 1900, passed in order "to define and fix the standard of value, to maintain the parity of all forms of money issued or coined by the United States, to refund the public debt and for other purposes," placed the country firmly on a gold basis. The gold dollar, consisting of $25\frac{8}{10}$ grains of gold, nine-tenths fine, was taken as the unit of value, and all other

forms of money were to be maintained at a parity with it. All legal tender notes were to be redeemed in gold coin; the gold reserve for that purpose was increased to $150,000,000, and, if at any time it fell below $100,000,000, it was to be brought up to its maximum again by the sale of gold bonds. The full legal tender quality of the silver dollar remained exactly as it had been provided for by the Acts of 1792 and 1837, but there was no free coinage of silver.

The Act of 1900 also dealt with the national bank system, though without effecting any radical change in it. Between the years 1873 and 1896 the authorized capital stock of the banks had increased by nearly a third, whilst the circulation of bank-notes secured by bonds had fallen by more than a half. The cause of this diminished circulation is to be sought for in the increased prosperity of the country and in the improvement of the Government credit. The National Debt was rapidly decreasing, the price of Government bonds was rising and was enhanced by the purchase of its bonds by the Government itself, often at a high premium, when money was accumulating in the Treasury. As a result it was more profitable for the banks to lend money in the open market than to spend it in the purchase of bonds, which was a necessary preliminary to any increase of their note circulation. The increase that took place after 1891 was due to a fall in the price of bonds. The Act of 1900 did not, as had been suggested, provide for the retirement of Government notes issued in accordance with the Act of 1890, and neither did it do anything to make the bank-note circulation more elastic except by slightly modifying the existing system of a bond-secured circulation. To encourage the purchase of bonds by the banks it allowed them to issue notes to the par value of the bonds deposited, instead of to the extent of 90 per cent. of their value only, and it further

allowed most of the old types of bonds to be converted into a new issue running for thirty years and paying interest at the rate of 2 per cent. only. As a result there was a rise in the note circulation greater in proportion than the rise in the capital stock of the banks. The clause reducing the legal minimum amount of capital from $50,000 to $25,000 had the effect of increasing considerably the number of the national banks, which rose from 3,601 in 1896 to 6,873 in 1908, though, as the new banks were for the most part small, the aggregate capital was not increased in proportion.

The financial disturbances of 1893 were succeeded by a period of industrial expansion marked by a great increase in the output of gold, a general rise of prices, and an unprecedented expansion of the American export trade. As a result there was an abnormal accumulation of foreign credit, the prices of investments rose, foreign holders of United States securities sent them back, and for the first time the United States began to lend money to Europe. This period of prosperity contained elements of danger, for the spirit of speculation was rife and capitalists were embarking recklessly on great industrial enterprises. The danger was pointed out by Leroy Beaulieu: "The growing industrial States, particularly the new countries, are at this moment demanding more capital than the whole world has accumulated recently, or is accumulating to-day—the truth is, nations, quite as much as individuals, have reached the point where they must limit their undertakings to the possibilities of the case; that will be done, if not willingly, then by force of events."

A new element of difficulty was added between the years 1897 and 1907 by the great development of trust companies and State banks, which issued their own securities and were under no legal obligation to keep any adequate reserves. Hence the financial operations of these institutions and corporations could be extended

almost without regard to the quantity of lawful money they had in reserve, and by 1907 their total liabilities had risen to over $5,000,000,000, while their cash reserve had been increased by only $171,000,000. The bank-notes had increased, but not in proportion to the increase in other securities, and an increased bank-note issue at best is evidence rather of an increase in the public debt than of a greater gold reserve. Hence almost the whole of this enormous system of credit had been built up on paper. In 1907, when a great mass of new securities were thrown on the market it was generally felt that speculation had reached its limit, and confidence fell when Government began to prosecute some of the great corporations which dominated industry. The crisis illustrated the fact that the rigidity of the American banking system prevented an expansion of paper money in which the people could have confidence in a time of difficulty, and in such times the currency was inadequate to meet legitimate business demands; in this year, for instance, it bore a premium as high as 4½ per cent.

Mr. Cortelyou, Secretary of the Treasury, acting in co-operation with Mr. Pierpont Morgan, took steps to lessen the tension, and by depositing large sums from the public funds with the banks he enabled them to relieve the pressure to a certain extent. Attempts were also made to get money from abroad. The Bank of France would not come to the rescue as it had done in the case of the English crisis of 1890, because there was no central bank with which it could deal, but a good deal of money was obtained from England, though the discount rate of the Bank of England advanced three times in eight days, rising as high as 7 per cent. To get further supplies of money Government opened subscriptions for bonds for the construction of the Panama Canal, and confidence was gradually restored.

As a result of this crisis the Aldrich Vreeland Act was

passed in 1908, as a temporary measure. By this Act the national banks were authorized under certain conditions to issue additional notes, provided that they paid a tax on them at the rate of 5 per cent. per annum for the first month, with an increase every month at the rate of 1 per cent. per annum until the tax reached 10 per cent. The object of the Act was to avoid the depletion of the bank reserves in times of pressure. It made no fundamental change and did nothing to regulate bank credit; at best it was "a measure to mitigate money stringencies and panics after the event" (Morawnetz). When the panic of 1907 had subsided it was seen that the results were not so far reaching as in former years. Since 1882 there has been a change in the character of financial speculation. In earlier days speculation was based mainly on the raw materials and finished products of commerce, and collapse came when prices reached such a height that the goods could not be sold and when loans could no longer be obtained from the banks except at increased rates. The modern structure of commerce is much more complex; the stock market is affected at once by changes in commercial conditions in any part of the world, for securities now play a much greater part in the financial business of the world than in former times—"securities have become the most convenient way of settling international balances, have become in a large measure a substitute for money, and have to be considered in dealing with monetary problems" (Conant). According to the same writer the crisis of 1907 established the principle "that the capital invested in the machinery of the processes of current production had come to constitute a permanent fund of wealth in comparison with which the amount infected or impaired by a single financial disturbance was becoming a steadily diminishing ratio."

Part III

The characteristics of the currency system of the United States as compared with the systems of European countries are (1) that in the United States the percentage of gold in the circulation is small in comparison with the amount of silver and paper money, and (2) that the percentage of legal tender currency which is not gold, although the currency is on a gold basis, is much greater than in Europe. Both silver dollars and Government notes have to be kept on an equality with gold, but the restriction of the coinage of dollars and the certainty of redemption of notes on demand prevents either from falling below par.

The metallic currency was established on its present basis by the Acts of 1873 and 1900. Though the gold dollar still remains the monetary unit of value, the smallest gold coin now struck by the Mint is the quarter eagle ($2½). All the gold coins—the double eagle and the eagle with its half and quarter—are unlimited legal tender, and the Government receives all the gold deposited at the Mint by private individuals and converts it into coin or into bars for trade purposes free of charge; but, though no seignorage is taken, the depositor is required to provide at his own expense the alloy used in making the coins. As in England, gold coins are not legal tender if they fall below a certain weight, and the loss in this case falls on the last holder of the coin; this question, however, is not of much importance in the United States, as gold is so little used for currency purposes. The silver coins are the dollar, which is unlimited legal tender, and the half-dollar, quarter-dollar, and dime, which are legal tender to the extent of $10. There is no free coinage of silver, and silver bullion is bought by the Government for purposes of coinage when it is required. Since the great fall in the price of silver the seignorage on the coinage

of silver, which used to be 5 per cent. or 7 per cent., has risen to over 100 per cent., for the ratio between the metals, which was formerly 16 : 1, is now about 35 : 1. The five-cent pieces of nickel and copper and one-cent pieces of copper are legal tender to the value of twenty-five cents. The coinage of three-cent pieces has been discontinued.

The Americans still show a preference for the use of paper money, and the actual circulation of gold and silver coins in the country is minimized by the use of gold and silver certificates. These certificates are issued only against bullion actually deposited in the Treasury; they are receivable for all public dues, the national banks are allowed to keep specie reserves in this form, and they can be redeemed in coin at the Treasury; but they are not otherwise legal tender and the general public are not bound to accept them in the settlement of debts. Yet they are freely used by the people, who find them more convenient than coin, and the expense of the transport of metal and of the wear and tear of coin is thereby avoided. Gold certificates are not issued for any denomination of less than $20, and three-fourths of the whole amount in circulation is issued in denominations of over $50; silver certificates are intended to be used for smaller transactions, 90 per cent. of the whole amount in circulation being issued in denominations of $10 or under. Currency certificates were issued after 1872 in denominations of $5,000 and $10,000 in return for legal tender notes deposited; they were found to be a convenient means of withdrawing gold from the Treasury and of enabling city banks to settle their clearing-house balances, but as there was later a plentiful supply of gold certificates they were not issued after 1900.

The use of coin is reduced as well by the circulation of legal tender notes, issued by Government, and of bank-notes. The restriction which the Constitution intended

to impose on the power of the Government to issue legal tender paper money had been swept away by the exigencies of the Civil War; by a liberal interpretation of the law the powers which a sovereign Government needed to exercise it was held to possess, unless checked by any specific prohibition, and in 1884 the Supreme Court decided that legal tender notes could be issued in time of peace as well as in war. The existing legal tender notes consist of greenbacks and the Treasury notes issued under the Act of 1890. The legal tender notes issued between 1862 and 1890 are known as greenbacks, and the amount outstanding—to the value of $346,681,016—remains where it was left by the Act of 1878; notes for small denominations have been withdrawn from circulation, and only those in denominations of $10 or over remain. They are still legal tender for every purpose except for the payment of interest on the National Debt, but it is only since 1879 that they have been receivable for the payment of duties on imports by Treasury order to avoid the trouble of carrying gold to and from the Customs House. The legal tender notes issued under the Act of 1890 were gradually withdrawn from circulation by the substitution of silver certificates, and in 1902 the quantity left in circulation was of the value of $24,000,000 only. These notes are redeemable at the Treasury on demand, and in order to get sufficient gold for this purpose interest-bearing bonds have been issued by the Government; but notes when redeemed and paid into the Treasury are not cancelled, so that they can be re-issued and become permanently a perpetually recurring drain on the Treasury. There is no fear of the Government being unable to redeem the notes in specie, as it is authorized by law to keep the gold reserve up to or above the minimum of $100,000,000 by the sale of bonds, but the system is expensive, as the Government is burdened with the payment of the interest on these bonds, and thus the National Debt is increased.

The notes of the national banks are not full legal tender; they are receivable for all Government dues, except duties on imports, and are legal tender in payment of debts or liabilities to any national bank, but private creditors cannot be forced to receive them.

The chief defect of the national banking system is still the want of elasticity in its note circulation, which exposes the country to the dangers of an insufficient currency in times of financial excitement when a larger circulation is required. This difficulty is enhanced by the Sub-Treasury system, which withdraws money from the ordinary channels of trade, though to avoid the accumulation of treasure the Secretary is allowed to deposit surplus revenues in the banks and to spend money in buying back Government bonds. The national banks are forced to keep a legal minimum reserve, but this reserve is not uniform all over the country, and the more remote districts might in times of difficulty find that their reserve, though adequate, could not be easily obtained. A few cities are taken as Central Reserve Cities, and the national banks in these keep reserves in lawful money to the extent of 25 per cent. of their deposits; in others, known as Reserve Cities, reserves are also kept to the extent of 25 per cent. of deposits, but only half the reserve need consist of lawful money, and the other half may be kept in the form of deposits with banks in the Central Reserve Cities. The country banks are only forced to keep a reserve of 15 per cent. of their deposits, and of this only two-fifths need be kept in lawful money, the other three-fifths may be in the form of deposits in the banks of the Reserve or Central Reserve Cities. Thus in a time of pressure it might easily happen that the country banks might find a difficulty in obtaining an adequate supply of lawful money, even though they had fulfilled the legal reserve requirements.

There is little likelihood of the United States adopting

the principle of a great central bank for the purpose of regulating the currency, and it is doubtful whether such a scheme would be practicable in a country of such vast dimensions, but the need for some adequate means of regulating and protecting the system of general credit so as to prevent violent fluctuations is keenly felt. There are in the country nearly 7,000 national banks and nearly twice as many State institutions and corporations, and each, acting in its own interests only, has a tendency to expand its issues of notes or securities without due regard for the general condition of credit. There is no way of regulating the supply either by a central institution or by common action among the banks themselves, as in the case of the Canadian and Scotch banking systems, and thus the supply of notes and securities is generally either too plentiful or too scarce.

CONCLUSION

That the importance of the monetary system of England was realized from very early times is shown by the fact that it was always recognized as coming within the prerogative rights of the sovereign. Though this point of view may have been encouraged by the king because it was possible to gain some pecuniary profits from his rights over the coinage, yet his powers of dealing with it were looked upon rather as a national duty than as a royal privilege, and it was mainly in the interests of the nation that its regulation was carried on. The principles put forward by Nicholas Oresme, a French economic writer at the end of the fourteenth century, were that the money belonged to the community, not to the prince, that though the prince could issue and regulate the currency yet it was not his property but that of the whole body that used it, and that consequently he had no right to make a profit out of it or to tamper with it. Down to the time of the Tudors these principles were on the whole maintained by the English sovereigns. Practically the only way in which the kings attempted to make private profits on the coinage was by seignorage charges, which were always regarded as their legitimate right, and which, though they were possessed of a high degree of elasticity, were not felt to be either a serious burden or a grievance. Depreciation of the coinage for royal profit was frequently a very serious evil in France, but in England it was only in the time of the Tudors, in the short period between 1545 and 1558, that the sovereigns attempted by depreciation of

the quality of the metal to solve their financial difficulties at the expense of the nation. The gradual reduction in the weight of the coins that was going on in the fourteenth and fifteenth centuries stands on a different footing altogether, and merely checked the fall of prices that would otherwise have resulted from the increasing scarcity of the coinage. The aims that the sovereigns put before them were to keep an adequate supply of good coins in the country and to maintain their monopoly, but in neither respect were their efforts attended with much success. They proved themselves quite unequal to the task of dealing with the complications and difficulties of the bimetallic system, with the constant opportunities for making illicit profits that it offered to false coiners and money-dealers, and they failed to realize the fact that the influx and efflux of the precious metals were regulated by economic laws which the legislation of the Government was almost powerless to affect. Thus not infrequently, but more especially in the time of the early Stuarts and at the beginning of the nineteenth century, the country was denuded of coinage; and, though it was a cardinal point of Government policy to keep a large stock of precious metals in the country, it was not known with any certainty what steps should be taken to gain a supply or to keep it after it had been obtained. Almost equal difficulties were found in maintaining the royal monopoly with regard to the coinage. Except for the baronial coinage of Stephen's reign and the irregular money struck during the civil war of the reign of Charles I., there was no open infringement of the royal monopoly, but secret coining was constantly going on, and at various times large quantities of base money were thrown on the circulation. The tokens issued by traders stand on rather a different footing, for they were never supposed to be legal tender, and were only issued to supply the deficiency of coins of small value. It was not until Government

realized its duties in this respect, and itself supplied a sufficiency of small coins, that it was possible to suppress these irregular issues entirely.

In modern times it has been recognized that with regard to the metallic currency the Government monopoly must be rigidly maintained, and that, in order to have an adequate supply of small coin, it is advisable to maintain the distinction, which was almost unknown in mediæval times, between legal tender coins and subsidiary coins. The coins which are used as unlimited legal tender must be current at what is practically their bullion value, if the monetary system of the country is to be established on a sound basis. The subsidiary coins, which are rated in terms of the legal tender money, are used only for internal trade, and, as they are legal tender only for small amounts, it is not necessary that their nominal value and their bullion value should correspond. The value of the English sovereign and of the American eagle is practically the same as the market value of the bullion contained in them, whilst both in England and America silver and bronze or nickel coins are in reality Government tokens, and the metal contained in them is worth considerably less than the nominal value at which they pass current. Yet, as they are coined only on Government account and to a very limited extent, and can only be used for purposes of internal trade—because in fact they are subsidiary only—there is no fear of their driving out good coin. If there is a very marked difference between the nominal and bullion value of the coin, it is still possible to make a profit by counterfeiting, but the general custom of striking coins with milled edges has made counterfeiting and clipping a much more difficult and dangerous task than in former days. It is a generally accepted principle that there must be free coinage of the legal tender metal; both in England and the United States the Mint is bound to accept or buy at a fixed rate all gold that is brought in by individuals.

In the United States a minimum gold reserve must be kept in the Treasury by law, and if the reserve falls below the minimum the Government takes active steps to replace it ; in England, if the supply of gold shows a tendency to decrease, the drain is counteracted by a rise in the rate of Bank discount, and the supply is regulated without Government intervention. The quantity of subsidiary coinage needed to supply the country with small currency is determined by the Government, which buys metal at the market price and issues coins to which it gives a nominal value, making a heavy profit on the transaction. In dealing with the subsidiary coinage the Government not only has to consider the quantity required but must provide a currency which will be found convenient by the people. The difficulty of keeping unpopular coins in circulation has been proved over and over again. In England, for instance, four-shilling and five-shilling pieces are too unwieldy for general use, and the fourpenny piece was discontinued because it was so difficult to distinguish it from the threepenny piece, whilst in America it was only possible to use silver coin to any considerable extent by substituting silver certificates for the unwieldy dollars and half dollars. The circulation of foreign coins which was very general in former days can hardly be regarded as an infringement of the royal monopoly, for both in England and America, when there was so frequently a scarcity of coins, the Government welcomed an influx of the precious metals in any form, and only regarded them as a difficulty if they were debased and drove good coin out of circulation.

Notwithstanding the attempts that were made to reintroduce a bimetallic system towards the close of the nineteenth century, nothing has been done to disprove the theory, put forward by the economists of the seventeenth century, that only one metal can be the standard of value in any one country. The history of five hundred years of

bimetallism shows that if there are two standards and the Mint ratio between them is not exactly the same as the market ratio, the undervalued metal will disappear from the circulation, and it is impossible for the Mint to follow sufficiently closely the fluctuations of the market ratio without bringing confusion into the currency. How far it would be possible to maintain a ratio, which would merely approximate to the market ratio, by universal international agreement is hardly a question for practical politics, because there seems to be no likelihood of getting international agreement on the subject. The special feature of the bimetallic system is the opening of the mints to the unlimited coinage of both metals, and at the present time the countries with the double standard of value, which is not exactly the same thing as bimetallism, refuse to give silver coin in exchange for standard silver bullion of equal weight, though they are all ready to give standard gold coins in exchange for bullion. Hence gold is now in practice, all over the Western world at least, the real standard by which values are measured.

Paper money was not recognized in the same way as coin as a Government monopoly. Paper money was issued first by private enterprise; it was not legal tender, and both its capabilities as an instrument of credit and its relations to the metallic currency were for a long time very imperfectly understood. The quantities in circulation, however, were soon so large that the Government was obliged to make some attempts at regulation, though acting at first more or less in the dark. Nearly three centuries of experience in paper money have led to the recognition of the following principles. (1) That the fundamental difference between paper and metallic currency is that paper money has no intrinsic value in itself, that it is entirely dependent for its value on public confidence, and that that confidence depends on the certainty of its ultimate convertibility into metal. This principle was not fully

recognized in the eighteenth century, and was quite lost sight of in the greenback controversy after the American Civil War, when the inflationist party were acting on the assumption that paper money had intrinsic value in itself, and that the Government by an issue of paper notes was actually creating a form of wealth. (2) That paper money is bound to depreciate if it is issued in larger quantities than are required for currency purposes, and that a depreciated paper currency will drive good money—whether coin or paper—out of circulation as surely as it would be driven out by a debased metallic currency. Before this was realized the danger of over-issues was very great, because the paper currency could be so rapidly and easily increased, and a fresh issue often gave temporary relief, though at the cost of greater difficulties later. Both the English Government in the Napoleonic wars and the American Government in the War of Independence and the Civil War had recourse to excessive issues of paper money to tide them over times of pressing difficulty, and in both countries private banking institutions gained temporary profits for themselves by the same means, but in every case the nation as a whole suffered.

By the middle of the nineteenth century the dangers of over-issue were so clearly recognized in England that by Peel's Bank Charter Act an attempt was made to give the Government the monopoly of the issue of paper money in order that regulation might be more effectual; but, though the monopoly has been maintained as far as bank-notes are concerned, the use of other forms of paper money has in practice frustrated the purpose of the Act. Yet there is no danger to be feared on this score, for paper money at the present time in England is all practically convertible, and thus, as far as quantity is concerned, it can be trusted to regulate itself; cheques, for instance, are cancelled as soon as they are paid into a bank, and bills of exchange are cancelled as soon as they mature.

On the other hand, the inconvertible notes issued between the years 1797 and 1819 never went out of circulation, though fresh issues could constantly be added to them, and in the case of the country bank-notes, at the end of the eighteenth century, the uncertainty of the solvency of the banks issuing them, and consequently of the value of the notes themselves, had much the same effect as if they had been inconvertible. In the United States a certain quantity of greenbacks are still inconvertible; but, as the amount is strictly limited and the people have full confidence in the solvency of the Government, this causes no difficulty. It was probably the fear of over-issue that led to the prohibition of bank-notes for sums smaller than £5 in England. If it is safe to judge from the popularity of £1 and £2 notes in Scotland, and from the very general use of notes for small sums in the United States and in European countries as well, their disuse in England may be held to be due to Government action rather than to any popular prejudice against them, and for the purpose of sending small sums by post it has been found necessary to get a substitute in the form of postal and money orders.

In England there is much less direct Government control over the paper currency than in America. In England the powers of the Bank have been defined clearly by legislation, but there is practically no administrative interference; the Bank of England, acting as the Bank of the Government, enjoys Government support, and alterations in the rate of discount, which are the work of the Bank Directors and not of the Government, are practically the only means taken to regulate the supply of gold. In the United States the Government takes charge of the greater part of the revenue by the Sub-Treasury system, which has the effect of continually withdrawing money from circulation. It issues various forms of paper money itself—greenbacks and gold and

silver certificates—in addition to the notes issued by the banks, and the bank-note issues are hampered by the necessity for securing note issues on Government bonds. "In no other civilized country," remarks an American writer, "is there such an absurd Governmental interference with the currency supply, affecting values, promoting speculation, retarding business, and disturbing the welfare of the people" (Hepburn).

There is a wide difference between the financial problems of mediæval times and those of the present day. In former times the main difficulty was to keep an adequate supply of the precious metals in the country and to check the nefarious schemes of money-dealers who could make a private profit by exporting them. The main problem is now to get a true rate of exchange between countries using widely different currencies, and the supply of specie is secured by regulating the rates of interest and discount. Trade in mediæval times was based almost entirely on a metallic currency, and paper money and credit were used only to a limited extent. The nineteenth century was marked by an enormous extension of the system of credit, and the organization of this credit system is so sensitive that any disturbance in one centre is felt throughout the whole of the monetary world. Finance has, in fact, become an international rather than a national question, and the monetary history of any one country tends to become merged more and more in the monetary history of the whole of the civilized world.

GLOSSARY

Alloy.—Base metal mixed with the precious metals in coins.

Assay.—To test by chemical process the composition of a coin in order to determine the relative proportion borne by the alloy to the pure metal

Barter.—Trade by exchange of commodities without the employment of any form of money as a medium of exchange

Base Metal.—Metal of less value than the precious metals.

Bill of Exchange.—"An open letter of request from one man to another desiring him to pay to a third party a specified sum and put it to the account of the first' (Chambers)

Bimetallism.—The use of two metals on equal terms as legal tender currency.

Brassage.—A charge made by the Mint to defray the expense of coinage

Bullion.—Gold and silver, in bars or in the mass, but not converted into coin or manufactured.

Carat.—A measure of weight—about $3\frac{1}{6}$ grains, divided into four carat grains—used for diamonds and precious stones In stating the fineness of gold, the number of carats always expresses some fraction of 24, thus gold 22 carats fine means a mixture of gold and alloy, composed of 22 parts of pure metal to 2 of alloy

Cheque.—An order for the payment of a specified sum, drawn on a bank and payable on demand from the deposit lodged at the bank by the drawer of the cheque.

Coin.—A piece of metal stamped with an officially authorized device which gives it a certain legal current value as money.

Content.—The quantity of metal contained in a coin

Credit.—"Any note, bill, or other document, on the security of which a person can obtain funds" (Chambers).

Currency.—Anything that is employed as a medium of exchange, whether an article, coin, or paper money.

Denomination.—Any particular class of coins or notes, such as shillings, notes for $5, etc.

Depreciation.—A lowering of the actual value of money—whether coin or paper money—below its nominal value.

Die.—An engraved stamp used for impressing a design on a coin.

Discount.—"A charge made at a certain rate per cent. for the interest of money advanced on a bill or other document due at some future time" (Chambers).

Fineness.—The proportion of pure metal to alloy in coins.

Foreign Exchange—The rate at which the money of one country may be exchanged for the money of another.

Legal Tender.—Any form of authorized money which a creditor can be forced to accept in satisfaction of a debt.

Measure of Value—Currency or money of account, representing a certain definite value, in terms of which the value of commodities can be expressed

Medium of Exchange.—An article, coin, or note, universally acceptable, because recognized as possessing a certain definite value in exchange Everything used as a medium of exchange must be also a measure of value

Mint—A place where money is struck and issued

Money.—Anything used as a medium of exchange and measure of value, including currency, money of account, and credit instruments

Money of Account.—A term used to express a certain quantity of metal, and used as a measure of value, but not represented by any coin in actual use.

Moneyer.—A person officially authorized to coin money

Nominal Value.—The rate at which a coin is declared to be current by the authority which issues it.

Par of Exchange—"The established value of the coin or standard of value of one country expressed in the coin or standard of value of another (Chambers)

Payment in Kind.—Payment in commodities instead of in money

Payment by Tale.—Payment by reckoning coins at their nominal value, instead of at their intrinsic value as bullion

Rate—To estimate the value of one coin or metal in terms of another coin or metal

Ratio.—The relative value of two metals. Thus when the ratio of silver to gold is 15 1, gold is fifteen times more valuable than silver—or, in other words, a certain quantity of gold will purchase fifteen times that amount of silver.

Seignorage.—A charge made by the sovereign on the issue of coin over and above the expenses of coinage and the value of the metal

Standard of Value.—The officially authorized unit of value—generally a coin—by which the values of other coins and commodities can be measured.

Subsidiary Coins.—Coins which are issued by public authority but are not full legal tender.

Token Coins.—Coins not issued by any recognized authority, generally of small value and current only on sufferance.

Treasury Notes.—Paper money issued by the Government.

Type.—"The design on the face of a medal or coin" (Chambers).

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